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A Revision of the Genus *Stenoloba* Staudinger (Lepidoptera, Noctuidae, Bryophilinae), with Descriptions of 25 New Species and 3 New Subspecies from East Asia (I)

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Abstract In the revision of the genus *Stenoloba* Staudinger, 1892, which distributed mostly in the Oriental region (South-East Asia) and partially in Manchurian subregion of the Palaearctic region, 47 species including 25 new species and three new subspecies are recognized. In the first part of this revision, 21 species with descriptions of 10 new species and two new subspecies are reviewed, with illustrations of 42 genitalia and 29 colour photos of adults. One species, *Stenoloba albiangulata* (Mell, 1943), **comb. nov.** is newly combined and transferred to this genus. The 2nd part will include 26 species, with descriptions of 15 new species.

Key words Taxonomy, Noctuidae, Bryophilinae, East Asia, new species, *Stenoloba*

INTRODUCTION

The genus *Stenoloba* Staudinger, 1892, was erected for a curiously looking moth, *Dichagyris jankowskii* Oberthür, 1884, which distributed in the central and northern part of the Pacific Asia (Russian Far East, NE China, Korea, Japan). Subsequently, a small number of *Bryophila*- or *Cryphia*-like species occurring in the same region as the type species and also in certain parts of the tropical southeast Asia have been placed in the genus by authors. A rather significant increase of the knowledge on the genus was given by Draudt (1950), who studied the Chinese material of the Höne expeditions and described three new species. The next important contribution was a work by Sugi (1970), who revised Japanese species of the genus with examination of the genitalia and proposed a new genus, *Lophonycta*, for *Stenoloba confusa*, removing it from *Stenoloba*, due to its strikingly different external appearence and male genitalia from all other species of the genus. In the last decade, further three new species of the genus were described from Taiwan (Chang, 1991), Nepal (Yoshimoto, 1994), and Korea (Kononenko and Ronkay, 1998).

The revisional work of certain Bryophilinae groups of the Pacific region has revealed the fact that the genus *Stenoloba* is much larger than it can be estimated on the basis of the previous informations. It

comprises a series of species which placed in other genera, often not Bryophilinae, and predic-tably many further species will be recognized, including undescribed ones, in the monsoonic-subtropical areas of the eastern Asia, especially in Taiwan, SE China and northern Indochina, and also in the southern Himalayas and in Malaysia.

As a result of the comprehensive studies, based on materials from new expeditions in the given regions, and also on the unidentified Chinese material of the Höne collection, 47 species were recognized, with more than two dozens of new species. The genus is divided into 10 species-groups. The present study is the first part of the revision containing the general diagnosis of the genus, a revised checklist based on the new results, and the characterization of 21 species including descriptions of 13 new taxa belonging to the first five major species-groups; the other 26 species including 15 new taxa will be reviewed and illustrated in the second part of the series.

MATERIAL EXAMINED

The *Stenoloba* material examined for the present study was based on the following institutes and museums: Zoologisches Forschungsinstitut und Museum Alexander Koenig (ZMFK, Bonn); Hungarian Natural History Museum (HNHM, Budapest); National Science Museum, Tokyo (NSM, Tokyo); Institute of Entomology of Czechian Academy of Sciences (IECzAS, Ceske Budejovice); The Natural History Museum (formerly British Museum, Natural History; BMNH, London); National Institute of Agriculture Science and Technology (NIAST, Suwon, Republic of Korea); Taiwan Forestry Research Institute, Taipei (TFRI, Taipei). Valuable material from private collections of Gy. Fábián, P. Gyulai, B. Herczig, M. Hreblay, S.T. Kovács, G. Ronkay, W. Speidel, S. Sugi, and H. Yoshimoto have also been borrowed and examined.

SYSTEMATIC REVIEW

Stenoloba Staudinger, 1892 (Type species: *Dichagyris jankowskii* Oberthür, 1884 [RFE: Primorye terr.]).

Neothripa Hampson, 1894 (Type species: *Neothripa punctistigma* Hampson, 1894 [N India]).

Conicophyta Hampson, 1918 (Type species: *Chytonix olivacea* Wileman, 1914 [Taiwan]).

Generic diagnosis:

The morphological characteristics for the genus *Stenoloba* are listed as followings. Some of them appear exclusively in the subfamily Bryophilinae. Sugi (1970) excluded *Stenoloba confusa* (Leech) which reported by Draudt (1950) from China as *Stenoloba*, describing as a new genus *Lophonycta* Sugi.

External features (Figs 1-29):

- conical or rounded frontal prominence (present in all examined species);
- developed tongue (present in all examined species);
- thoracic crest (distinct in fresh specimens, but sometimes not strongly expressed), in some groups

abdominal crest also present;

- male antenna filiform or finely serrate;

- forewing often narrow and (or) with parallel costal and inner margins, or broader, higher; outer margin perpendicular to inner margin in most cases; tornal angle rounded;

- forewing colouration often green of greenish, or with greenish tint or markings; antemedial line often forming white, whitish or orange mark in tornal area; scaling smooth, fine, some species with erected scales in dark elements of forewing; wings strongly shining;

- hindwing broad, rounded, usually darkened.

Male genitalia (Figs 30-52):

- uncus often reduced, rudimental or short and weak; in certain cases long, slender, or broad, flattened; sometimes short and broad;

- tegumen always narrow, long, in some species moderate or short;

- juxta more or less triangular, with triangular or rounded basal plate and often with more or less developed apical extension;

- vinculum short, weak;

- valva elongate, usually narrow; cucullus tapering, armed by a field of strong, spine-like setae, or at least a few bristles or with a stronger extension at apex. In some species groups distal part of valva broadened, costa with a large or small extension;

- erected part of harpe always missing, its basal plate often present;

- sacculus regularly smooth, usually rather short, but in a few cases very long, with pointed, flat distal extension;

- anal tube broad, rounded, sclerotized, in case of three closely related species (*S. nigralbasalis* group), forming scaphium;

- aedeagus relatively short, broad; carina sometimes with scobinate plate;

- vesica rather short, broadly tubular, recurved, often with diverticula; a part of the known species armed with strong cornutus and or with spine-like, small cornuti arranged into field(s); in a few cases with narrow, sclerotized bar.

Female genitalia (Figs 53-71):

- ovipositor weak, short; papillae anales sometimes slightly elongate;

- antrum sclerotized, flat, medium-long or long, mostly quadrangular or cup-shaped;

- ductus bursae often short, flattened, variably strongly sclerotized, smooth or folded; sometimes long, tubular, sclerotized;

- cervix bursae variable, from small to large, membranous to heavily sclerotized, bearing folds and /or crests;

- corpus bursae usually elongate, membranous.

List of Species (type locality in square bracket):

[PART 1]

The *jankowskii* species-group:

1. *S. jankowskii* (Oberthür, 1884) (*Dichagyris*) [RFE, Primorye terr., Askold Isl.]
2. *S. marina* Draudt, 1950 [China, West Tien-mu-shan]
3. *S. assimilis* (Warren, 1909) (*Metachrostis*) [Japan, Tsushima]
   3.1. *S. assimilis. assimilis* (Warren, 1909)
   3.2. *S. assimilis taiwana* **ssp. n.** [Taiwan]
4. *S. lampra* **sp. n.** [North Vietnam]

The *manleyi* species-group:

5. *S. manleyi* (Leech, 1889) [Japan, Honshu]
   5.1. *S. manleyi manleyi* (Leech, 1889) (*Selepa*) [Japan, Honshu]
   5.2. *S.manleyi ryukyuensis* **ssp. n.** [Japan: Ryukyu, Korea: Cheju Isl.]
   5.3. *S. manleyi formosana* **ssp. n.** [Taiwan]
6. *S. likianga* **sp. n.** [China, Likiang]
7. *S. bachmana* **sp. n.** [North Vietnam]

The *clara* species-group:

8. *S. clara* (Leech, 1889) (*Selepa*) [Japan, Honshu]
9. *S. clarescens* **sp. n.** [Taiwan]
10. *S. albiangulata* (Mell, 1943) (*Bryophilopsis*) [South China, North Vietnam]
11. *S. oculata* Draudt, 1950 [China]
12. *S. brunnescens* **sp. n.** [North Vietnam]

The *olivacea* species-group:

13. *S. olivacea* (Wileman, 1914), (*Chytonix*) [Taiwan]
14. *S. fontinalis* Kononenko & Ronkay, 1998 [Korea]
15. *S. albistriata* **sp. n.** [Upper Mianmar, Vietnam]
16. *S. futii* **sp. n.** [Malaysia]
17. *S. cineracea* **sp. n.** [China, Tapaishan]
18. *S. rectilinea* Yoshimoto, 1992 [Nepal]

The *basiviridis* species-group:

19. *S. basiviridis* Draudt, 1950 [China, West Tien-mu-shan]
20. *S. domina* **sp. n.** [Taiwan]
21. *S. dominula* **sp. n.** [China, Fukien]

[PART 2]

The *sericea* species-group:

22. *S. sericea* **sp. n.** [North Vietnam]
23. *S. variegata* **sp. n.** [North Vietnam]
24. *S. viridimicta* (Hampson, 1910) [India, Darjeling]
25. *S. chlorographa* **sp. n.** (*viridimicta* sensu Yoshimoto, 1994) [Nepal]

The *lichenosa* species-group:

26. *S. lichenosa* **sp. n.** [Taiwan]
27. *S. lichenosella* **sp. n.** [North Vietnam]
28. *S. aenescens* (Moore, 1888), (*Selepa*) **comb. n.** [North India]

The *glaucescens* species-group:

29. *S. glaucescens* (Hampson, 1894) (*Neothripa*) [India, Meghalaya]
30. *S. glauca* **sp. n.**
31. *S. albipicta* **sp. n.** [China, Likiang]
32. *S. rufosagitta* **sp. n.** [Taiwan]

The *nigrabasalis* species-group:

33. *S. nigrabasalis* Chang, 1991 [Taiwan]
34. *S. nora* **sp. n.** [Taiwan]
35. *S. ochribasis* **sp. n.** [Laos]

The *viridescens* species-group:

36. *S. viridescens* **sp. n.** [North Vietnam]
37. *S. cinechlora* **sp. n.** [North Vietnam]
38. *S. speideli* **sp. n.** [North Vietnam]
39. *S. tonkina* **sp. n.** [North Vietnam]
40. *S. longipennis* **sp. n.** [North Vietnam]

The following species have not been studied during this revision:

41. *S. elegans* Prout, 1828 [Borneo, Sarawak]
42. *S. ferrimacula* (Hampson, 1907) (*Erastria*) [India, Meghalaya]
43. *S. prasinana* Warren, 1913 [India, Meghalaya]
44. *S. punctistigma* (Hampson, 1894) (*Neothripa*) [India, Himachal Pradesh]
45. *S. robusta* Prout, 1928 [Borneo, Sarawak]
46. *S. simplicilinea* Warren, 1913 [India, Meghalaya]
47. *S. umbrifera* Hampson, 1918 [China, Sichuan]

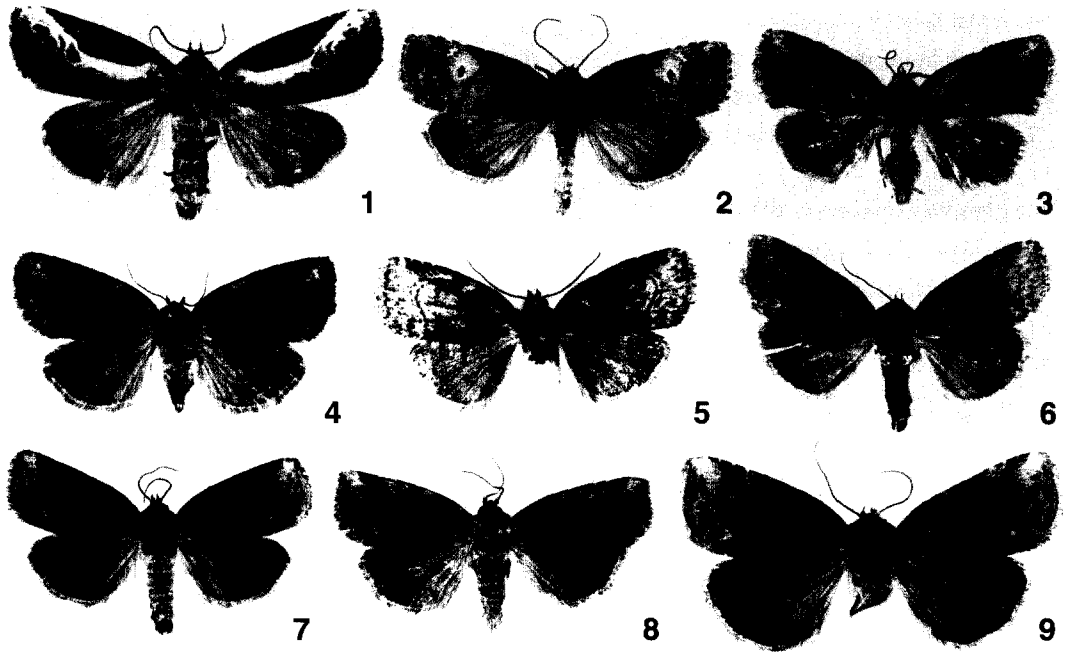
The *jankowskii* species-group

Stenoloba jankowskii (Oberthür, 1884)

(Figs 1, 30, 30a, 53)

Dichagyris jankowskii Oberthür, 1884, Etudes d'Ent. 10: 28, pl. 3: 5 (TL = type locality): RFE: Primorye terr., Bezverkhovo [Sidemi] [LT = location of type: BMNH, London]).

Edema nivilinea Leech, 1888, Proc. zool. Soc. Lond. 1888: 638, pl. 32; 1 (TL: Japan: Oiwake [LT:



Figs 1-9. Adults: 1. *S. jankowskii* (Oberthr, 1884) (RFE, Primorye terr.); 2. *S. marina* Draudt, 1950, lectotype (China, West Tien-mu-Shan); 3. *S. assimilis assimilis* (Warren, 1909) (RFE, Primorye terr.); 4. *S. assimilis taiwana* **ssp. n.**, holotype (Taiwan); 5. *S. lampra* **sp. n.**, holotype (North. Vietnam); 6. *S. manleyi manleyi* (Leech, 1889) (Japan, Honshu); 7. *S. manleyi ryukyuensis* **ssp. n.**, holotype (Japan, Ryukyu); 8. *S. manleyi ryukyuensis* **ssp. n.** (Korea, Cheju Isl.); 9. *S. manleyi formosana* **ssp. n.**, holotype (Taiwan).

BMNH, London]).

Stenoloba jancouscia: Hampson, 1910, Cat. Lepid. Phalaenae Br. Mus. 9: 113, emendation. Sugi, 1970: 133, fig. 5; Sugi, 1982: 1: 685, 2: 348, pl. 167: 48; Kononenko, Ahn and Ronkay, 1998: 202, fig. 523.

Diagnosis. Adult. Wingspan 28-32 mm. This species is the largest one in the genus with some odd appearance. It is easily recognizable and separable from all other relatives by its curious colour of forewings: Ground colour dark grey-olive, a wide white longitudinal stripe, running from base to apex of wing, divides the forewing into costa and tornal parts medially; lower boundary of this stripe often rather diffuse; reniform stigma encircled with white, postmedial and upper part of the subterminal crosslines, also defined partly with whitish border.

Male genitalia (Figs 30, 30a). Described and illustrated by Sugi (1970). A further detailed diagnosis is given here as follows: Uncus small, rudimentary; tegumen relatively short, with expressed shoulders and narrow lobes; vinculum U-like, longer than tegumen in length; juxta broadly subdeltoidal-pyriform. Valva simple, rather thick, curved, distally tapering, rounded apically, with small spine on lateral surface near dorsal margin just before apex; cucullus with few fine setae at extremity. Aedeagus large, rather thick, sclerotized; carina strongly scobinate; vesica large, broadly tubular, with a large basal and two smaller

apical diverticula and with a strong, spine-like cornutus medially.

Female genitalia (Fig. 53). Ovipositor weak, short; papillae anales rather wide; apophyses anteriores longer than posteriores. Antrum sclerotized, flattened, long, quadrangular. Ductus bursae very short; cervix bursae sclerotized. Corpus bursae elongate, membranous, about as long as antrum.

Material examined. JAPAN: 3 ♂, Asamayama (Japan) VII 1914; 6 VII 1914 (H. Höne); Yokohama, 8 VIII 1912 (H. Höne) [ZFMK, Bonn]. Russian Far East: Primorye terr.: 24 specimens, Kedrovaya Pad nature reservation, Troitzy Bay (Andreevka), Ryazanovka, Bezverkhovo [Sidemi], Ussuriisky nature reservation, Zanadvorovka, Kievka, Vladivostok, De Friza peninsula [IBP, Vladivostok], Collecting data 26 VII-18 VIII. KOREA: a series of specimens from both North and South Korea (HNHM, Budapest).

Distribution. Russian Far East (Primorye terr.), Korean peninsula, Japan, North-East China.

***Stenoloba marina* Draudt, 1950**

(Figs 2, 31, 31a, 54)

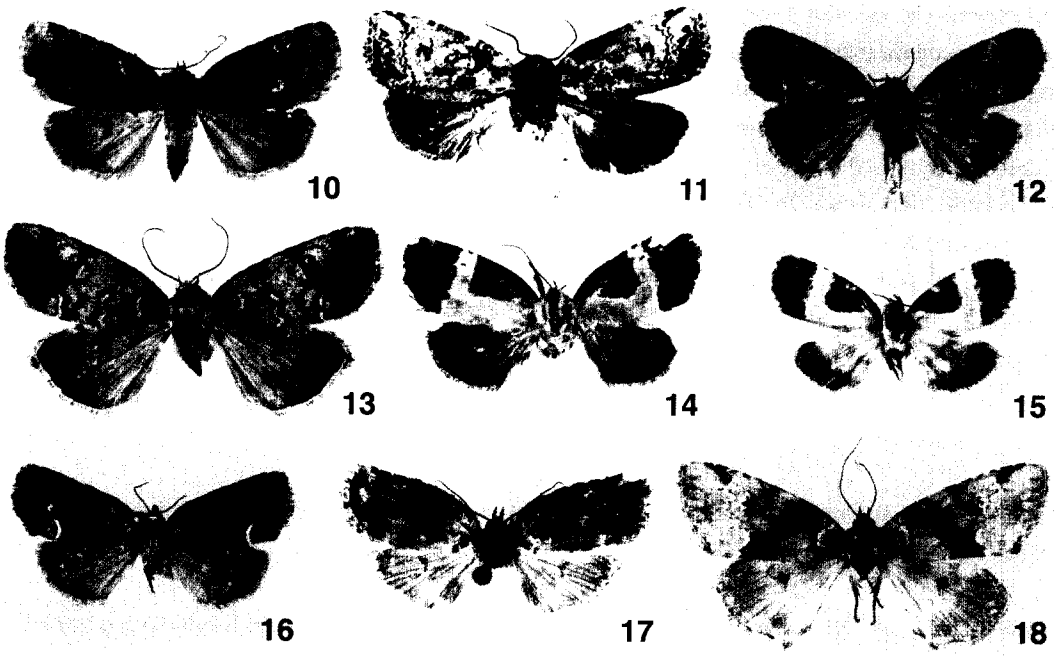
Stenoloba marina Draudt, 1950, Mitt. münch. ent. Ges. 40: 131, pl. 8: 18 (Erastriinae), (TL: China, West Tien-mu-shan [LT: ZFMK, Bonn]).

Diagnosis. Adult. Wingspan 27-28 mm. The species is easily distinguished from its congeners by its characteristic pale greyish basal field and the large pale area around the reniform stigma. Thoracic crest high, rusty-greyish. Forewing rather narrow with almost parallel margins and rounded tornal angle. Ground colour of forewing pale grey with darker greyish irroration. Basal line double, shadowed by dark scales, antemedial line double, dark-grey filled with paler grey. Medial field wide, orbicular stigma and another spot below cell fiery red; median fascia thin, shadow-like, oblique. Reniform stigma short, bar-like, dark blackish grey, encircled with fine whitish line and defined by a large pale ochreous-greyish patch between median fascia and postmedial line around. Postmedial line double, subterminal line dark, diffuse, bordered by pale yellowish-grey scales on both sides; terminal line marked by a row of pale spots; cilia speckled. Hindwing yellowish grey, darker in outer part, discal spot traceable; cilia grey, with yellowish inner line.

Male genitalia (Figs 31, 31a). Uncus short, but longer than in *S. jankowskii*; tegumen and vinculum narrow, almost equal; juxta deltoidal. Valva simple, gradually tapering distally, rounded apically; costa slightly curved at middle; apex of valva weakly extended ventrally, with small but strong, spine-like setae. Aedeagus large, with sclerotized, bend-like carina, bearing flat, sclerotized extension; vesica wide, tubular, curved ventrally, distal part with cornuti field consisting of small, spiniform cornuti.

Female genitalia (Fig. 54). Ovipositor weak, short; papillae anales elongate; apophyses posteriores and anteriores equal in length. Antrum sclerotized, flat, rather long, more or less quadrangular, slightly constricted caudally, its upper margin with shallow cut. Ductus bursae short; cervix bursae sclerotized, wrinkled. Corpus bursae elongate, membranous.

Material examined. Lectotype (designated here): ♂, China, Prov. Zhejiang, with label: "West Tien-mu-shan (1,600 m), Pz. Chekiang" 26 VI 1932 (H. Höne); "Holotype *Stenoloba marina* Draudt, ♂. Paralectotypes: 1 ♂ (indicated as allotype, ♀), Hoeng-Shan (900 m), Provinz Hunan, China 28 IV 1933 H. Höne/Allotype *Stenoloba marina* Draudt, ♀; 4 ♂, "West Tien-mu-shan, Prov. Chekiang", 27 VII



Figs 10-18. Adults: 10. *S. likianga* **sp. n.**, holotype (China, Likiang); 11. *S. bachmana* **sp. n.**, holotype (North Vietnam); 12. *S. clara* (Leech, 1889) (Japan, Honshu); 13. *S. clarescens* **sp. n.**, holotype (Taiwan); 14. *S. albiangulata* (Mell, 1943) (North Vietnam); 15. *S. albiangulata* (Mell, 1943) (South China); 16. *S. oculata* Draudt, 1950, lectotype (China); 17. *S. brunnescens* **sp. n.** holotype (Vietnam); 18. *S. olivacea* (Wileman, 1914) (Taiwan).

1932 (H. Höne)-Type series including the lectotype are deposited in ZFMK, Bonn. 1♀, SW China, Sichuan, Sheng, Jurzhat Gou, 2120 m alt. Nanping Xian, 26 VII 1993 (S. Ueno) [NSM, Tokyo].

Distribution. East and South China (Prov. Zhejiang, Hunan, Sichuan).

***Stenoloba assimilis* (Warren, 1909)**

(Figs 3-5, 32-34, 32a-34a)

Metachrostis assimilis Warren, 1909, in Seitz, Macrolepid. World 3: 22, pl. 4: i (TL: Japan: Tsushima [LT: BMNH, London]).

Boursin, 1951: 158, pl. 11, fig. 6; Sugi, 1970: 133, fig. 3; Sugi, 1982, 1: 685, 2: 348, pl. 167: 46; Kononenko, Ahn and Ronkay, 1998: 202, fig. 520.

The species was described from Tsushima Island (Japan), between Kyushu Island and the southern cape of Korean peninsula. It is widely distributed in Japan (Honshu, Shikoku, Kyushu), occurs also in Korea, China, and the southern part of the Russian Far East; reported from Taiwan by Sugi (1992). The comparison of the material of *S. assimilis* originating from Japan, Korea, and Russian Far East with the specimens from Taiwan revealed that the Taiwanese populations differ from the continental east Asian and Japanese ones on subspecific level. The description of a new subspecies is given below.

***Stenoloba assimilis assimilis* (Warren, 1909)**

(Figs 3, 32, 32a, 55)

Diagnosis. Adult. Wingspan 24–26 mm. Forewings narrow, rather short. Ground colour of forewing shiny ash-grey with some olive tint, especially in basal area and at inner margin. Basal part of wing darker, antemedial line double, medial field irrorated with browhish scales around reniform stigma, postmedial line double, subterminal line dark, diffuse. Dark elements of wing pattern, particularly antemedial line and inner line of postmedial crossline marked with erected scales. Apical angle with diffuse pale ash-grey spot; cilia greyish. Hindwing dark yellowish grey, inner part somewhat darker; cilia grey with pale inner line.

Male genitalia (Figs 32, 32a). Uncus present, relatively short, flattened; tegumen high, narrow; vinculum narrow, short; juxta deltoidal, wider at base. Valva simple, long, narrow, with parallel margins, distally slightly tapering; obliquely rounded at apex, bearing a single, thick spine ventro-apically, directed distally, and a group of strong setae in distal part of valva; sacculus well bulged dorsally. Aedeagus large, shorter than length of valva; vesica tubular, wide, armed with a single, broad-based, strong spine.

Female genitalia (Fig. 55). Ovipositor weak, elongated; gonapophyses relatively long, equal in length. Antrum sclerotized, cup-shaped, with shallow cut in upper margin. Ductus bursae short, strongly sclerotized; cervix bursae sclerotized, bearing two folds. Corpus bursae elongate, membranous.

Material examined. Russian Far East: Primorye terr.: 48 specimens, Kedrovaya Pad nature reservation, Troitzy Bay (Andreevka), Ryazanovka, Bezverkhovo [Sidemi], Ussuriisky nature reservation, Zanadvorovka, Vladivostok [IBP], slide No. IBP590, ♀. Collecting data: 18 VII–16 VIII. KOREA: 1♀, Chonnam Prov., Youngkwang, Mt. Taechong, 8 IX 1998 (D.S. Ku) [NIAST, Suwon, Korea].

Distribution. Japan, Korean peninsula, China, Russian Far East: Primorye territory.

***Stenoloba assimilis* taiwana ssp. n.**

(Figs 4, 33–34, 33a–34a)

Diagnosis. The new subspecies differs from the nominotypical race by its generally darker colouration of the forewings with more intense greenish tint, and by the more sharply defined and distinct dark wing pattern. The male genitalia of *S. a. taiwana* are similar to those of *S. a. assimilis*, differing from the latter mostly by their smaller size.

Description. Adult. Wingspan 24–26 mm. Ground colour of forewing olive brownish-grey, darker than that of *S. a. assimilis*. Basal field greyish near costa, darker in medial part; subbasal line double, subbasal field dark brown; antemedial line black, with erected scales; medial field brownish grey with olive tint; median fascia distinct, dark; reniform stigma encircled with distinct, dark line and surrounded with reddish area; postmedial line double, its inner line marked with erected scales; subterminal and terminal fields dark brownish grey; subterminal line indistinct, marked by pale greyish dots; apical angle with wide, diffuse, pale ash-grey spot; terminal line dotted; cilia brownish grey with pale inner line. Hindwing dark brownish grey, darker in outer part; cilia brownish grey, with pale yellowish grey base.

Male genitalia (Figs 33, 33a, 34, 34a). Similar to those of the nominate subspecies but all structures somewhat smaller and more gracile. Female genitalia have not been examined.

Material examined. Holotype: male, Taiwan, Lushan spa (Nantou Hsien), 1200 m, 20-23 VIII 1984 (Y. Kishida); slide No. SS 4095. Paratype: 1♀, from the same locality, 30 VII-1 VIII 1984 (K. Yazaki). The types are deposited in the collection of NSM, Tokyo.

Distribution. Taiwan.

***Stenoloba lampra* sp. n.**

(Figs 5, 35, 35a)

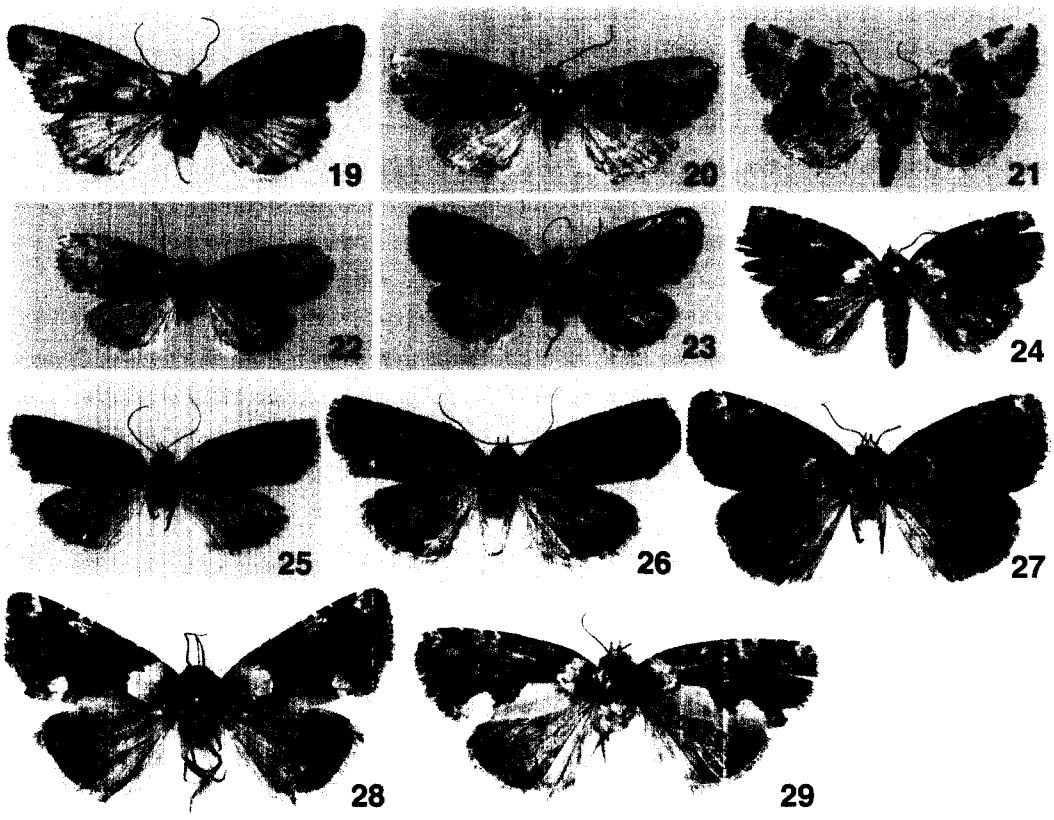
Diagnosis. The new species is closely related to *S. assimilis taiwana*, but differs from the latter by its more intense dark greenish blue shining in the base of forewing and the stronger olive-greenish suffusion in basal, medial and costal areas. The male genitalia of *S. lampra* differ from the related taxa by their narrower valva, tapering strongly at apex, higher, narrower juxta, and by the wider, more globular vesica armed with shorter but broader cornutus.

Description. Adult. Wingspan 24 mm. Ground colour of forewing olive-brownish grey, darker than in *S. a. assimilis* and *S. a. taiwana*. Basal field olive-brownish near costa, dark blackish with bluish shining in medial part; subbasal line double, subbasal field blackish; antemedial line black, double, defined with erected scales, filled with olive-brown; medial field brownish grey with olive tint; median fascia dark, rather distinct in costal and ventral parts of wing; orbicular stigma represented by vertical black streak with erected scales; area around reniform stigma olive-brownish, outline of reniform with dark suffusion; postmedial line double; inner line with erected scales. Marginal field pale brownish grey, with darker suffusion; subterminal line indistinct, defined by diffused dark spots; apical angle with large, diffuse, indistinct pale brownish grey mark; terminal line dotted; cilia brownish grey with pale inner line. Hindwing dark brownish grey, darker in outer part; discal spot small, indistinct; cilia brownish grey, with pale yellowish grey inner line.

Male genitalia (Figs 35, 35a). Uncus developed, short, flattened; tegumen long, narrow; vinculum narrow, short; juxta deltoidal, wider at base, tapering apically. Valva simple, long, narrow, slightly tapering distally (more tapering towards apex, than in *S. a. assimilis* and *S. a. taiwana*) and armed ventro-apically with a single, thick spine (being shorter than in *S. a. assimilis* and *S. a. taiwana*) directed distally, and with a group of strong setae in distal part of valva (being stronger and longer than in *S. a. assimilis* and *S. a. taiwana*); sacculus much narrower than those of the related taxa. Aedeagus relatively large but shorter than valva; carina short, finely scobinate; vesica tubular, wide (much wider than in case of the related taxa), armed with a single, small, spine-like cornutus sitting on strong, wide base. Female unknown.

Material examined. Holotype: male, Vietnam, Prov. Lao Cai, Sa Pa, Frontier Satelite camp FTS, 22° 20'48N, 03° 47'45E, 1690 m, 24-25 VIII 1998, leg. A. Kun, Slide No. 6435 (♂) Ronkay. The holotype is deposited in the Hungarian Natural History Museum (Budapest).

Distribution. Vietnam.



Figs 19-29. Adults: 19. *S. fontinalis* Kononenko & Ronkay, 1998, holotype (Korea); 20. *S. albistriata* **sp. n.**, holotype (Myanmae); 21. *S. albistriata* **sp. n.**, paratype (Vietnam); 22. *S. futii* **sp. n.**, paratype (Malaysia); 23. *S. cineracea* **sp. n.**, holotype (China, Tapaishan); 24. *S. cineracea* **sp. n.**, paratype (China, Tapaishan); 25. *S. rectilinea* Yoshimoto, 1994, m, paratype (Nepal); 26. *S. rectilinea* Yoshimoto, 1994, f, paratype (Nepal); 27. *S. basiviridis* Draudt, 1950, holotype (China, West Tien-mu-shan); 28. *S. domina* **sp. n.**, holotype (Taiwan); 29. *S. dominula* **sp. n.**, holotype (China, Fukien).

The *manleyi* species-group

Stenoloba manleyi (Leech, 1889)

(Figs 6-9)

Selepa manleyi Leech, 1889, Proc. zool. Soc. Lond. 1889: 479, pl. 52: 1 (TL: Japan: Yokohama [LT: BMNH, London]).

Sugi, 1970: 133, fig. 4; Sugi, 1982, 1: 685, 2: 348, pl. 167:47; Kononenko, Ahn and Ronkay, 1998: 202, fig. 521.

The species is rather widespread in the southern areas along the Pacific coast, the populations are clearly separable into three distinct geographic subspecies. The nominative one (type locality: Japan,

Honshu, Yokohama) is distributed in the mainland of Japan (from Honshu to Kyushu and Tsushima Isl.), the material examined from China (Shanghai, Mokan-shan) does not show significant differences compared with the nominotypical Japanese subspecies. The second subspecies occurring in Japan, *S. m. ryukyuensis* **ssp. n.** differs from the nominate one by its much darker colouration of forewing, smaller basal field and reddish irroration in central part of wing. It is distributed in the Ryukyu archipelago, the southern islands of Japan. The population lives in the Jeju Island, S Korea is considered here as close to this race. The third subspecies is known from Taiwan; it differs from the two other taxa by its larger size, more expressed grey-greenish suffusion of forewing and the reduced reddish irroration. The male genitalia of *S. m. formosana* also show some differences compared with those of the other two races. The *S. manleyi* group includes two another taxa, one of them is known from south-west China, the other from Vietnam. These taxa resemble externally *S. manleyi*, but they are easily separable from the latter by numerous external and genital features, therefore they are considered and described below as distinct species. The former one, *S. likianga*, differs from the Chinese populations of *S. manleyi* by its more unicolorous forewing, less intense greyish green suffusion and the details of the structure of the male genitalia, respectively.

Distribution. Japan (Honshu, Shikoku, Kyushu, Tsushima Isl., Ryukyus), Taiwan, Korea, South-eastern China.

***Stenoloba manleyi manleyi* (Leech, 1889)**

(Fig. 6)

Diagnosis. Adult. Wingspan 24-28 mm. Head pale greenish brown, patagia greenish brown, marked with brown; tegulae greenish brown; thoracic crest grey brown, irrorated sparsely with greenish brown scales. Ground colour of forewing shining grey brown, with pale greenish grey irroration, especially in costal area. Wing pattern rather complex, basal line represented by small blackish spot at base; basal field pale greenish brown, sometimes with more or less rhomboidal reddish brown mark under veins Cu 1-2; subbasal line indistinct, shadowed, in costal area double, blackish, filled with green brown; subbasal field somewhat darker, brownish grey; antemedial line double, filled with brownish grey, oblique, waved; medial field lighter, brownish grey; orbicular obsolete or appearing as small indistinct spot; reniform often with reddish brown touch, encircled with thin blackish line, or with four black points connected to indistinct outline; median fascia indistinct, shadow-like; postmedial line thin, waved, blackish, with small dark mark in tornal area surrounded with indistinct reddish touch; subterminal and terminal fields lighter, with pale greyish apical touch, these fields well separated by chevron-marks of subterminal line; terminal line a row of blackish dots; cilia grey brown. Hindwings grey brown, darker in marginal area; cilia grey brown inside, pale greyish outside. Underside pale, yellowish grey brown, forewing darker, with pale yellowish grey irroration in costal area. Hindwing pale yellowish grey with diffuse, brownish discal spot and marginal field.

Male genitalia. Uncus moderately developed, flattened, apically tapering; tegumen long, narrow; vinculum rather short; juxta broadly rhomboidal, with apical extension. Valva rather ample, slightly asymmetrical strongly constricted at middle; distal part being largely expanded, covered with a field of

strong setae; right valva somewhat longer than left one; ventral margin of sacculus well-bulged. Aedeagus relatively short, about two times shorter than valva, its basal part constricted; carina thin, bend-like; vesica broadly tubular, with wide lateral diverticulum armed with a single, medium-large spine.

Female genitalia. Ovipositor weak, short; apophyses anteriores shorter then posteriores. Antrum long, flat, quadrangular, weakly extended apically, sclerotized in medial part. Ductus bursae short, flattened, sclerotized; cervix bursae sclerotized. Corpus bursae elongate, posterior part with sclerotized lateral plate on left side, other parts membranous.

Material examined. JAPAN: 1 ♂, Honshu, Mt. Takao, Tokyo-to, 4 IX 1950 (T. Ebato); 3 ♂, Honshu, Dohshi-Kanshi, Yamaguchi pref., 3 VIII 1973; 3 ♂, Shimokawa, Osugi-dani Mts, Oto, 21 VIII 1973 (S. Nakatani); 3 ♂, Honshu, Wakujama, Kii-Shinjo, 11-13 IX 1971 (C. Tanabe); 1 ♂, Nashimoto, Shizuoka pref., 24 VIII 1966 (T. Ebato); 5 ♂, Japan, Hyogo, Miki, 4 IX 1972 (M. Owada); 2 ♂, Yokohama (Japan) 15 VIII [19]12 (H. Höne). CHINA: 2 ♂, Shanghai, Prov. Kiangsu, 14-17 IX [19]26 (H. Höne); 1 ♂, Mokanshan, Prov. Chekiang, 3 IX [19]30 (H. Höne).

Distribution. Japan (Honshu, ?Shikoku, ?Kyushu), South China.

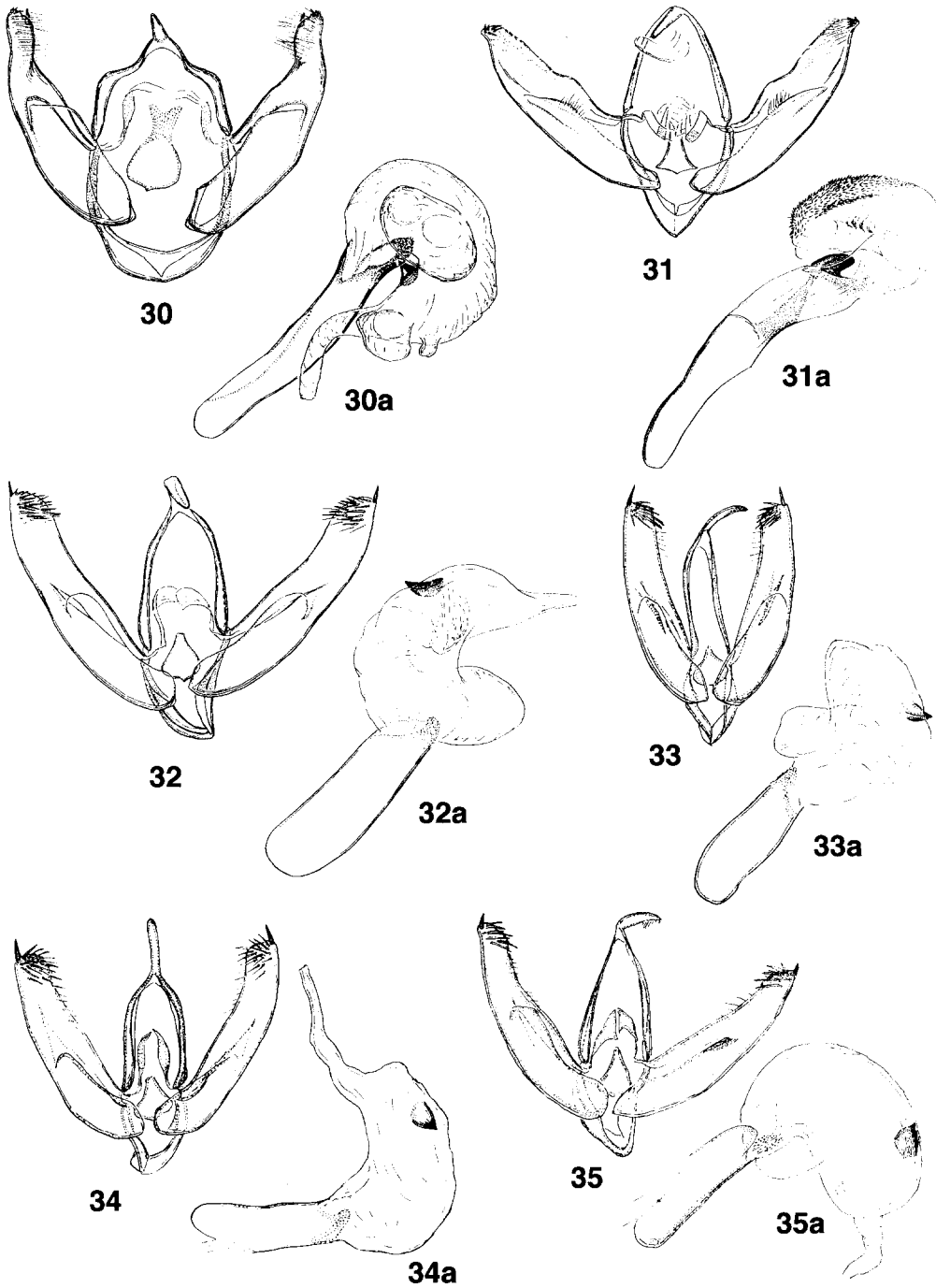
***Stenoloba manleyi ryukyuensis* ssp. n.**

(Figs 7-8, 36, 36a, 56)

Diagnosis. The new subspecies differs from the nominate one by its considerably darker ground colour of head, thorax and forewings, and the intense reddish brown irroration in central part of the forewing. No significant differences are found in the genitalia.

Description. Adult. Wingspan 25-29 mm. Head brownish or yellowish brown, darker than in S. m. manleyi; patagia dark greenish brown, marked with brown; tegulae dark greenish brown; thoracic crest brown with reddish brownish scales. Forewing ground colour dark greyish brown, much darker than that of *S. m. manleyi*, large areas with dark, shining greenish grey irroration, especially in basal and costal areas. Main elements of wing pattern similar to those of *S. m. manleyi*, but darker and more distinct. Medial area often with intense reddish brown irroration, especially around reniform stigma; postmedial line with distinct white mark near inner margin; subterminal and terminal fields and apical touch pale greyish, more contrasting than in *S. m. manleyi*; subterminal line more distinct, dentate, marked with arrowhead streaks; terminal line distinct, a row of black dots; cilia dark, grey brown. Hindwings deep, shining greyish brown, with some darker suffusion in marginal area; cilia grey brown inside, pale greyish outside. Underside much darker than in *S. m. manleyi*, yellowish grey brown; forewing darker, with pale yellowish grey irroration in costal area; hindwing paler yellowish grey with distinct, small discal spot, transverse line and marginal suffusion.

Material examined. Holotype: male, Ryukyus, Amami-oshima Is., Mt. Yuwan-dake, 470 m, 12-14 X 1988 (M. Owada). Paratypes: JAPAN: 5 ♂, Ryukyus, Amami-oshima Is., Mt. Yuwan-dake, 470 m, 12-14 X 1988 (M. Owada); 2 ♂, Ryukyus, Tokara Group, Nakanoshima Is. Sokanashinuma, 260 m, 27 X 1992 (M. Owada); 1 ♂, 1 ♀, Ryukyus, Tokunashima Is., Mikyo, 150 m, 31 X-1 XI 1992 (M. Owada); 1 ♂, Yakushima, Mt. Aikodake, 26 VII 1974; 3 ♀, Ryukyus, Okinawa Isl. Kunigami, Terubikiyama, 4 XI 1989 (M. Owada); 2 ♀, Ryukyus, Amami-oshima Isl. Mt. Yuwandake, 470 m., 12-14 X 1988 (M.



Figs 30-35. Male genitalia and their aedeagus (a): 30. *S. jankowskii* (Oberthr, 1884) (RFE, Primorye terr.); 31. *S. marina* Draudt, 1950, paralectotype (China, West Tien-mu-Shan); 32. *S. assimilis assimilis* (Warren, 1909), (RFE, Primorye terr.); 33. *S. assimilis taiwana* **ssp. n.**, holotype (Taiwan); 34. *S. assimilis taiwana* **ssp. n.**, paratype (Taiwan); 35. *S. lampra* **sp. n.**, holotype (North Vietnam).

Owada); 1♀, Ryukyus, Amami-oshima Isl., Naze, Kirsakubaru, 300 m, 11 X 1988 (M. Owada); 1♀, Mt. Aikodake, Yakushima, 26 VII 1974 (H. Inoue); 1♂, 4♀, Japan, Oku, Dogo, Choshigawa Riv., 200 m., 15, 18 VII 1993 (M. Owada). The Japanese specimens of the type series, including the holotype, are deposited in NSM, Tokyo. KOREA: 1♂, 6♀, Prov. Jeju, Mts Halla-san, 5 km SW of Jeju city, ca 500 m, 24 VIII 1992, No. 1637, leg. L. Ronkay & A. Vojnits [HNHM, Budapest].

Note. The specimens originating from the Jeju Isl., South Korea are regularly somewhat darker in colouration, having sharper markings, the ochreous-reddish irroration of the basal area is less conspicuous, covered partly with grey. They resembles the specimens of the population (s) occurring in the Ryukyu, and may represent a distinct, insular subspecies.

Distribution. Japan (Ryukyu archipelago: Amami-oshima, Nakanoshima, Tokunashima, Okinawa, Yakushima); S Korea (Jeju Isl.).

***Stenoloba manleyi formosana* ssp. n.**

(Figs 9, 37, 37a, 57)

Diagnosis. The new subspecies differs from the nominatiue one and *S. m. ryukyuensis* by its larger size, somewhat more rounded forewings. This subspecies also differs from the other subspecies by its darker ground colour with more expressed dark greenish brown irroration, and by the lack of the intense reddish brown suffusion of the forewing. The male genitalia of *S. m. formosana* are somewhat smaller than those of the other subspecies, the neck of valva is wider, the distal lobes are more asymmetrical, the aedeagus is thicker, and the cornutus is larger.

Description. Adult. Wingspan 30-32 mm. Head brownish green, darker than in *S. m. manleyi*; *patagia* dark greenish brown, bordered with black; tegulae dark greenish grey; thoracic crest high, greenish brown with reddish brown in centre. Ground colour of forewing dark greyish brown, much darker than that of *S. m. manleyi*, with shining dark greenish grey iroration, especially in basal and costal areas. Main elements of wing pattern similar to those of *S. m. manleyi*, but being darker and less distinct; submedial and medial areas with intrusion of a few reddish brown scales, being more distinct around reniform stigma; reniform bigger than in other subspecies of *S. manleyi*, encircled with thin, diffuse line, filled with somewhat darker scales; postmedial line distinct, dentate, with small orange brown mark, surrounded small dark tornal patch; subterminal and terminal fields and apical touch more pale greyish contrasting with terminal one; subterminal line represented by diffuse arrowhead spots; terminal line distinct, a row of black lunulae; cilia dark grey brown. Hindwing shining grey brown, marginal area somewhat darker; discal spot diffuse; inner half of cilia grey brown, outer part pale greyish. Underside as in *S. m. manleyi*, grey brown, forewing darker, with pale yellowish grey irroration in costal area. Hindwing paler yellowish grey, with distinct discal spot, transverse line and marginal suffusion.

Male genitalia (Figs 37, 37a). Uncus somewhat thinner, less constricted than in other subspecies; juxta wider, more plate-like, less tapering apically, without apical extension. Valva slightly shorter, but more massive than in other subspecies, with wider medial neck; cucullus-like distal lobes narrower and somewhat asymmetrical, medial plate of valva (rudimental complex of harpe) somewhat more developed than in *S. m. manleyi* and *S. m. ryukyuensis*. Aedeagus and cornutus of vesica also larger than those of

S. m. manleyi and *S. m. ryukyuensis*.

Female genitalia (Fig. 57). Antrum somewhat broader; ductus bursae slightly shorter than those of other races of *S. manleyi*. The sclerotized plate of corpus bursae is the longest within the related three subspecies.

Material examined. Holotype: male, Taiwan, Lushan-spa, 1200 m (Nantou Hsien), 24-27 VIII 1982, leg. H. Yoshimoto. Paratypes. TAIWAN: 1♂, Kussha, 13 VIII 1936, leg. E. & S. Asahina; 1♂, 1♀, Prov. Taoyuan, 14 km E Fuhsing, 800 m, 4 X 1995, 121°23'E, 24°50'N, leg. Csővári & St ger; 3♂, Prov. Nantou, 3 km SW Tsuifeng, 2100 m, 4-5 VIII 1996, 121°10'E, 24°06'N, leg. T. Csővári & L. Mikus; 2♂, Prov. Nantou, Ursun Forest, 16 km E Kuoshing, 560 m, 29 X 1996, 121°00'E, 24°05'N, leg. T. Csővári & Cs. Szabóky; 11♂, 7♀, Prov. Nantou, Meifeng, 24°05'N, 121°10'E, 2250 m, 17-18 IX 1999, leg. G. Csorba and B. Herczig; 1♂, Prov. Kaoshiung, 26 km SE of Taoyuan, 1370 m, 4 XI 1996, 120°52'E, 23°17'N, leg. T. Csővári & Cs. Szabóky; 1♀, Prov. Taouyan, 16 km E Fuhsing, 121°27'E, 24°50'N, 30 XI-1 XII 1997, leg. S. Simonyi & A. Szab; 11 specimens, Prov. Ilan, Fushan, 26-30 IX 1995, leg. J.B. Fan, W.T. Jou, J.J. Hsiao and A. Warneke; 1♂, 1♀, Prov. Taipei, 10 km SE of Pinglin, 450 m, 4 X 1996, leg. Gy. Fábián & F. Nemes; 4♂, 5♀, Prov. Taipei, Pihu, 24°54'N, 121°46'E, 400 m, 13 IX 1999, leg. G. Csorba and B. Herczig; 6♂, 9♀, Prov. Ilan, Ming Chyr, 24°39'N, 121°28'E, 1150 m, 11-12 IX 1999, leg. G. Csorba and B. Herczig; 4♂, 5♀, Prov. Hualien, Juisui, 23°30'N, 121°18'E, 1200 m, 20-21 IX 1999, leg. G. Csorba and B. Herczig.

The holotype and one paratype deposited in NSM, Tokyo, the other paratypes are deposited in the collections of the HNHM, Budapest, and TFRI, Taipei, T. Csővári, Gy. Fábián, B. Herczig, M. Hreblay and G. Ronkay.

Distribution. Taiwan.

***Stenoloba likianga* sp. n.**

(Figs 10, 38, 38a)

Diagnosis. *S. likianga* is a sister species of *S. manleyi*. It differs externally from the latter by more unicolorous forewing with much weaker dark moss-green irroration; the pale elements of wing pattern are light ash-grey, not greenish grey. The crosslines and the reniform stigma are also more distinct than those of *S. m. manleyi*. In the male genitalia, the whole armature of *S. likianga* is much smaller in size, the valvae are symmetrical and considerably narrower, the cucullus is pentagonal, the aedeagus is strongly constricted at base, and the structure of vesica is also different (see figs 7-9).

Description. Adult. Wingspan 25-28 mm. Head and thorax grey brown with a few yellowish brown scales in thoracic crest. Ground colour of forewing grey brown with pale grey irroration; basal line represented by two blackish spots; basal field yellowish brown, arcuate; subbasal line double, blackish, filled with yellowish brown; subbasal field dark brown grey; antemedial line double, filled with brownish grey; medial field brownish grey; orbicular stigma obsolete or a small, indistinct spot; reniform stigma encircled with thin blackish line; median line thin, rather diffuse; postmedial line thin, waved, blackish, with small orange yellowish mark in tornal area; subterminal and terminal fields well-separated by pale greyish suffusion; terminal line a row of blackish dots; cilia greyish brown. Hindwing grey brown; inner

half of cilia grey brown, outer part pale greyish. Underside grey brown, with yellowish grey irroration; transverse line of forewing and discal spot and transverse line of hindwing well discernible. Female unknown.

Male genitalia (Figs 38, 38a). All structures much smaller (about 1,3 times) and more gracile than those of *S. manleyi*. Uncus rather wide, wider than in *S. manleyi*; tegumen flat, high, narrow; vinculum short; juxta weak, plate-like with wide dorsal extension. Valvae symmetrical, much narrower than those of *S. manleyi*, elongate, basal two thirds gradually tapering, then gradually extended distally (but not so strongly as in *S. manleyi*); valval neck expressed; apex of valva more or less pentagonal (it is rounded in *S. manleyi*); covered with strong setae. Aedeagus smaller than in *S. manleyi*, with strongly tapering basal part; vesica broadly tubular, relatively short, dilated at middle, with wide flat diverticulum, bearing a single, flat, spine-like cornutus, which is shorter than that of *S. manleyi*, fused with membrane of vesica by its entire flat surface.

Material examined. Holotype: male, China, Likiang, Prov. Nord Yunnan, 5 VII 1935 (H. Höne), the specimen is not dissected. Paratypes: 1 ♂, with the same locality and collector as the holotype, 11 VI 1935; slide No. ZFMK, Bonn 1899 ♂; 1 ♂, from the same site, 2 VII 1934. The types are deposited in the collection of ZFMK, Bonn.

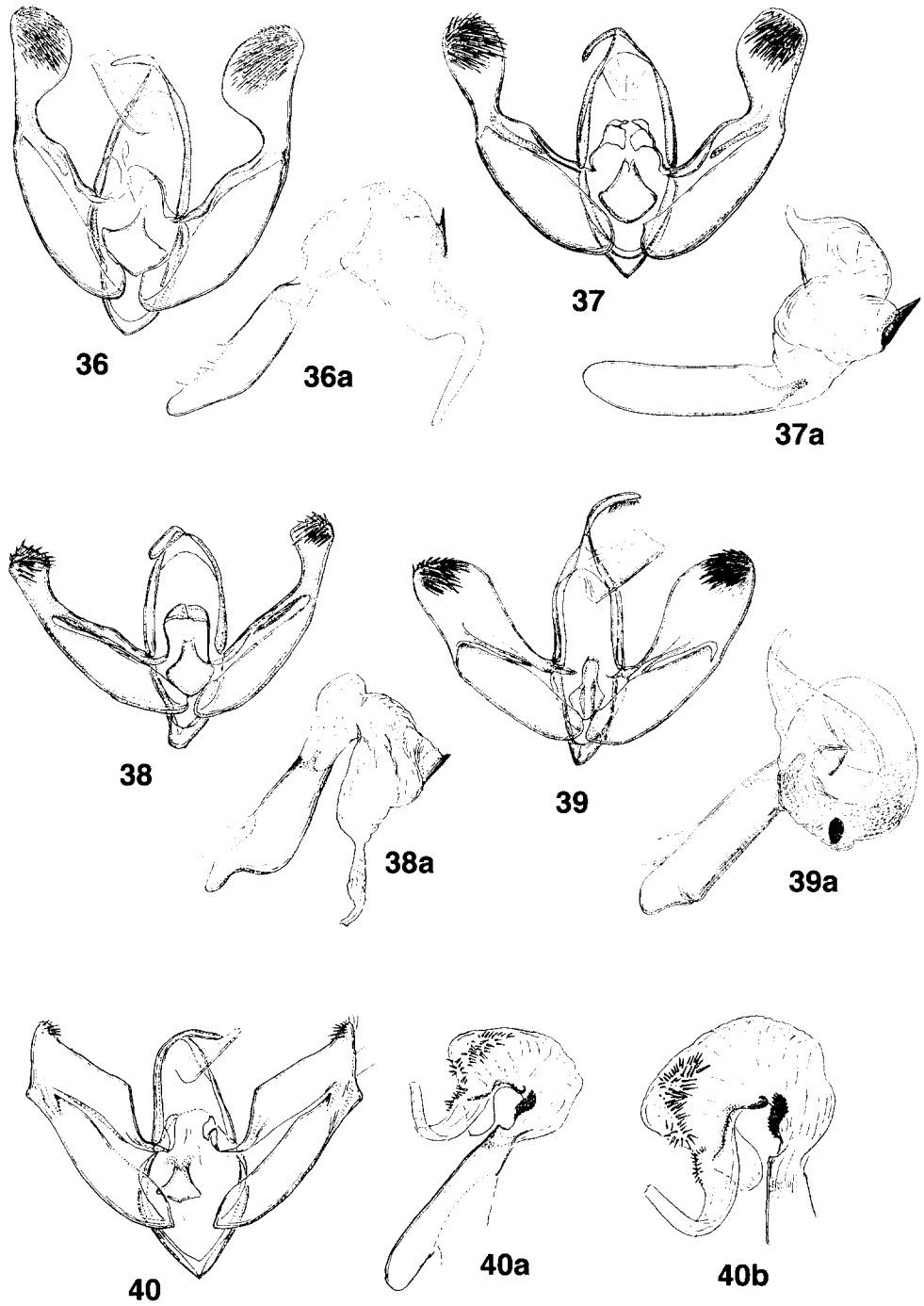
Distribution. South-west China (Prov. Yunnan).

***Stenoloba bachmana* sp. n.**

(Figs 11, 39, 39a, 58)

Diagnosis. The new species externally resembles *S. m. formosana*, but is easily distinguished from the latter by its ash-greyish ground colour and the well-developed forewing pattern. The male genitalia of the new species differ conspicuously from those of the other members of the *S. manleyi* group by the large, broad, medially not constricted valva and the well-developed, longer uncus; the female genitalia of *S. bachmana* have much larger sclerotized lateral plate in the posterior half of the corpus bursae than in those of the related species.

Description. Adult. Wingspan 32-33 mm. Head brownish grey mixed with ash-grey hair-scales; palpi dark grey laterally, pale yellowish grey ventrally. Thorax ash-grey; patagia brownish grey with dark brown border; tegulae ash-grey; thoracic crest high, built up from ash-grey scales having reddish brown tips. Ground colour of forewing pale ash-grey (paler than in *S. manleyi formosana*) with some yellowish green tint, especially between basal and postmedial lines; basal streak small, blackish; basal field ash-grey; subbasal line blackish, curved outwards; antemedial line double, blackish, filled with greenish grey; subbasal field with dark brown-reddish suffusion near ventral margin; medial field darkened, ash-grey with yellowish green tint, paler around reniform stigma; orbicular stigma elliptical, oblique; reniform narrow, with brownish suffusion in centre; median fascia diffuse, narrow; postmedial line double, its outer line finely dentate; subterminal field ash-grey, with pale ash-grey patch and black subapical streak in costal area; subterminal line reddish brown, wide diffuse, dentate; terminal field brownish grey; terminal line a row of black streaks; cilia ash-grey, with pale inner line. Hindwing dark greyish brown, darker in outer area, discal spot not traceable; cilia brown, with pale greyish outer margin and pale yellowish grey



Figs 36-40. Male genitalia and their aedeagus (a): 36. *S. manleyi ryukyuensis* **ssp. n.**, paratype (Japan, Ryukyu); 37. *S. manleyi formosana* **ssp. n.**, holotype (Taiwan); 38. *S. likianga* **sp. n.**, paratype (China, Likiang); 39. *S. bachmana* **sp. n.**, paratype, (North Vietnam); 40. *S. clara* (Leech, 1889), (Japan, Honshu), a - aedeagus, b - vesica, enlarged.

inner line. Underside greyish brown; costal margin of forewing pale ash-grey with two blackish marks and traceable, diffuse medial and postmedial lines; hindwing paler, with distinct discal spot; medial line and darker terminal area.

Male genitalia (Figs 39, 39a). Uncus well-developed, rather long, flattened; tegumen high, narrow; vinculum rather short; juxta relatively narrow, subdeltoidal, with rather wide apical extension. Valvae symmetrical, broad, distally slightly dilated, not or only very slightly constricted at middle; apical area covered with a field of strong setae; sacculus long, narrow, sclerotized. Aedeagus relatively long, thick, its basal part constricted; vesica broadly tubular, recurved into a full circle, distal half inflated and scobinate-verrucose, with a small, globular subterminal diverticulum, bearing small, wide-based, nail-shaped cornutus with tiny apical peak.

· Female genitalia (Fig. 58). Ovipositor weak, short; gonapophyses short; antrum long, flattened, quadrangular, slightly constricted at middle, sclerotized in medial part. Ductus bursae short, flattened, sclerotized; cervix bursae small, subconical, weakly sclerotized. Corpus bursae elongate, posterior part with large, long, folded sclerotized lateral plate on left side.

Material examined. Holotype: male, Vietnam, with label: Vietnam mer. Bach-ma Nat. Park, 16° 10'N, 107° 54'E, 1200 m, 26 VI-6 VIII 1996, leg. V. Sinjaev & W. Afonin; slide No. 6710 (♂) Ronkay. Paratypes: 15♂, 1♀, with the same data, as the holotype; slide No. 6711 (♀) Ronkay. The holotype and a part of the paratypes are deposited in the collection of Dr. M. Hreblay (Érd, Hungary), a part of paratypes is in the collection of Hungarian Natural History Museum (HNHM, Budapest).

Distribution. The species is known only from the type locality, Bach-ma National Park in Vietnam.

The *clara* species-group

Stenoloba clara (Leech, 1889)

(Figs 12, 40, 41, 41a, 59)

Selepa manleyi clara Leech, 1889, Proc. zool. Soc. Lond. 1889: 479 (TL: Japan: Yokohama [LT: BMNH, London]).

Sugi, 1970: 133, fig. 1; Sugi, 1982: 685, pl. 167, fig. 45; Kononenko, Ahn and Ronkay, 1998: 202, fig. 519.

Diagnosis. Adult. Wingspan 19-23 mm. The detailed comparison of *S. clara* with its close relative, *S. clarescens* **sp. n.** is given in the diagnosis of the new species. Males have large thoracic tuft consisting of erected scales. Forewing olive-grey, irrorated with greenish, basal and medial fields sparsely also with olive-greenish scales; terminal field brown-grey. Orbicular stigma represented by a dark dot, reniform by a white spot, surrounded with black scales, both stigmata marked with erected scales. Basal, medial and postmedial lines dark brown, defined with whitish border.

Male genitalia (Figs 40, 41, 41a). Uncus representing an intermediate stage within the genus, relatively short, flattened; tegumen high, narrow, almost as long as vinculum; juxta small, deltoidal. Valva relatively short, broad; costal margin obtusely angled before middle; apex triangular; outer margin of apical part

slightly obliquely truncate; dorsal angle of apex armed with small but strong setae. Aedeagus relatively narrow; vesica tubular, curved ventrally; basal part armed with small spinules arranged into semilunar patch; medial part with narrow sclerotized ribbon in inner curve; terminal part with two opposite diverticula, one of them armed with fine spiculi arranged into scarce, longitudinal field of cornuti.

Female genitalia (Fig. 59). Ovipositor weak, short; gonapophyses equal in length. Antrum sclerotized, elongate, cup-shaped, its anterior part forming tube-like, sclerotized structure, posterior margin with shallow cut. Ductus bursae short, membranous; cervix bursae sclerotized, bearing folds. Corpus bursae elongate, membranous.

Material examined. JAPAN: 2♂, Choji am Fuji (Japan), VIII 1916 (H. Höne) [ZFMK, Bonn]. 1♂, Shirozawa-spa Fukushima pref., VIII 1967 (T. Ebato); 3♂, Tamenoyu-spa, Fukushima ken, 3 VIII 1967 (T. Ebato); 1♂, Tanigawa-Spa, Gunma-Ken, 25 VII 1962; 3♂, 1♀, Honshu, Nagano Ina, Tera, 14-18 VIII 1971 (M. Owada); 1♂, 4♀, Shikoku, Tokushima, Myozai Shosenji, 31 VII 1971 (M. Owada); 1♂, Shikoku, Koshi, Takaoka, Morigauchi, 20-21 VII 1971 (M. Owada); 6♂, Doshi-Kenchi, Yamanashi pref., 26 VII 1973 (T. Ebato); 1♂, Nashimoto, Shisuoka-ken, 27 VIII 1965 (T. Ebato); 2♂, 1♀, Mt. Koyo, 3 VIII 1970 (Nakatani); 1♀, Nippara, Tokyo-to, 8 VIII 1961 (T. Ebato); 1♀, Bushi, Iruma, Saitama pref., 26 VIII 1981 (H. Inoue) [NSM, Tokyo]. CHINA: 3♂, 2♀, Hoeng-shan, Prov. Hunan, 11, 12, 15, 27 VII 1933 (H. Höne), slide No. Hö 376 ♂, Ch. Boursin, ZFMK, Bonn 1778 ♂, ZFMK, Bonn 1779 ♀, [ZFMK, Bonn]. KOREA: a series of both sexes, N Korea, Prov. Kangwon, Mt. Kumgang-san, at hotel Kumgang, Nos 788, 850, 859, 861, 14-24 VII 1982, leg. L. Forró & L. Ronkay; 1♂, 1♀, Kaesong, No. 873, 29 VII 1982, leg. L. Forró & L. Ronkay [HNHM, Budapest].

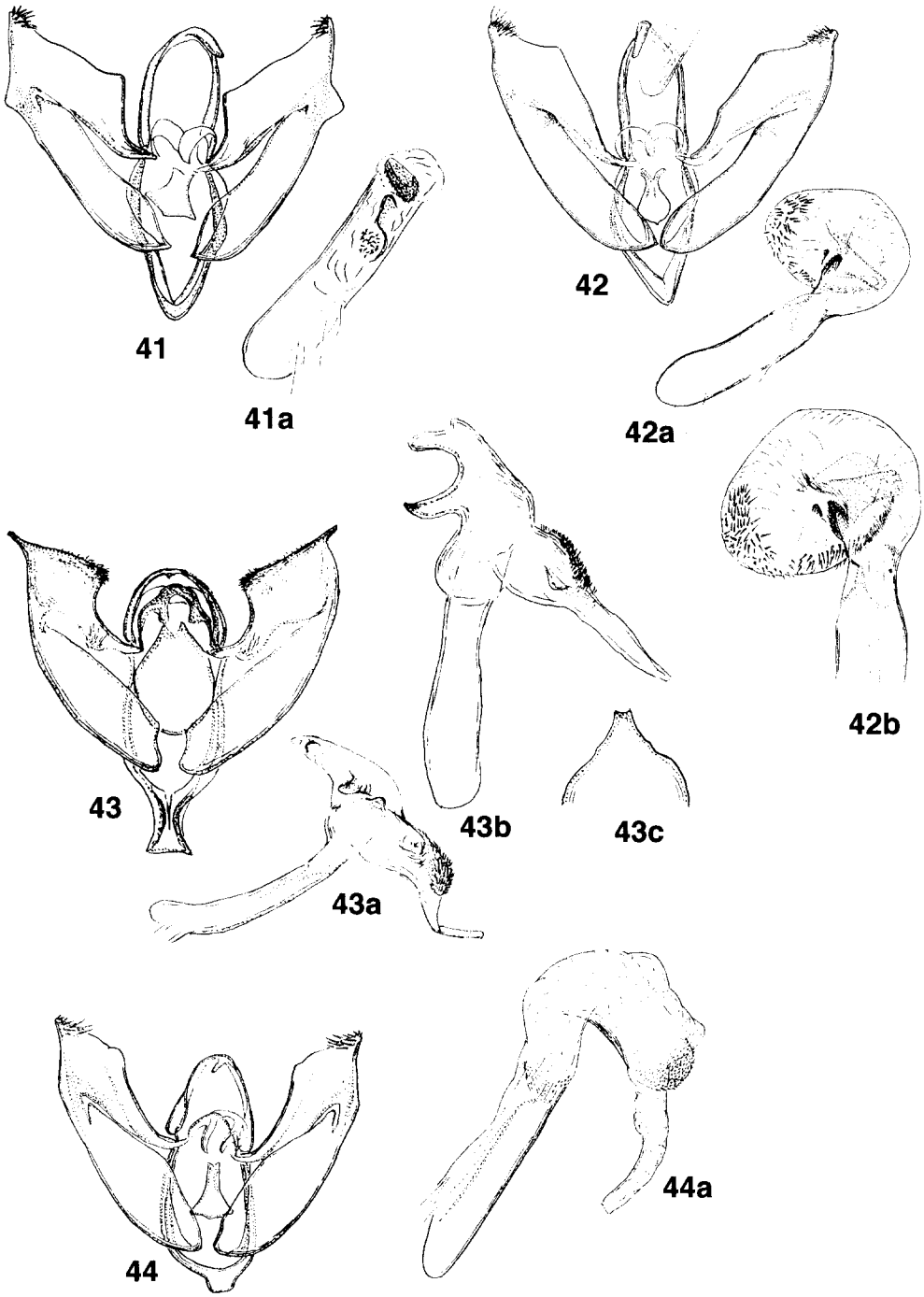
Distribution. Japan, Korea, Central China.

***Stenoloba clarescens* sp. n.**

(Figs 12, 42, 42a, 60)

Diagnosis. The new species is an allopatric sibling of *S. clara*. These two taxa are rather similar externally, but *S. clarescens* is significantly larger in size, the forewing ground colour is lighter, more shining, the crosslines are more sharply defined with stronger silvery-whitish filling and the reniform is longer. *S. clarescens* resembles also to *S. marina* but its forewing basal area is darker, the medial area is brighter, more greyish, the medial line is less defined, the reniform stigma is significantly longer and the subterminal line is more indistinct. The male genitalia differ from those of *S. clara* by the larger size of all structures, the more elongate shape of valva, the basally more rounded juxta and the shape and armature of the vesica (see figs 11-13). In the female genitalia the tubular anterior part of the antrum of *S. clarescens* is considerably shorter, weaker.

Description. Adult. Wingspan 26-30 mm. Head and thorax greenish grey mixed with brownish hair-scales; apical part of thoracic tuft red-brownish; abdomen grey. Forewing rather broad, ground colour greenish grey with silvery-bluish shining; marginal area suffused with red-brownish scales; crosslines sharply defined, double, more or less sinuous, filled with silvery white, medial line an indistinct, pale shadow; orbicular missing or a small blackish spot, reniform represented by a conspicuous, long, oblique black streak; subterminal line an interrupted, diffuse, brownish stripe, apical patch relatively small,



Figs 41-44. Male genitalia and their aedeagus (a): 41. *S. clara* (Leech, 1889), (China), vesica not everted; 42. *S. clarescens* **sp. n.**, paratype, (Taiwan), a - aedeagus, b - vesica enlarged; 43. *S. albiangulata* (Mell, 1943), (North Vietnam); a - aedeagus; b - ventral view, praep. 1893 (China); c - VIII sternite; 44. *S. oculata* Draudt, 1950, paralectotype (China).

silvery-greyish. Hindwing greyish brown, veins and marginal area somewhat darker, discal spot and transverse line poorly visible. Underside of wings greyish, forewing strongly suffused with dark greyish brown, discal spots and transverse lines strong but rather diffuse.

Male genitalia (Figs 42, 42a). Similar to *S. clara*, but all structures much larger; valva much more elongate. Uncus moderate, relatively short, flattened; tegumen high, narrow, almost as long as vinculum; juxta rounded subdeltoidal. Valva rather long, broad, costal margin only weakly angled at basal third; apex with small, triangular lobe, armed with small but strong setae; outer margin of apical part finely concave. Aedeagus relatively narrow, shorter than valva; vesica coiled ventrally, tubular; basal part with lunate patch of fine spinules; distal half armed with fine spinules arranged into sparse; longitudinal cornuti; terminal part with a large diverticulum.

Female genitalia (Fig. 60). Ovipositor weak, short; papillae anales larger and wider than those of *S. clara*, apophyses anteriores and posteriores equal in length; antrum rather wide, medium to long, flattened, sclerotized, with tube-like structure in centre, being much smaller than in *S. clara*. Ductus bursae short, membranous; cervix bursae weakly sclerotized, constricted finely at junction to corpus bursae. Corpus bursae elongate, membranous.

Material examined. Holotype: male, Taiwan, Taichung, Wulieng, 1850 m, 10-12 VIII 1990 (M. Owada); deposited in coll. NSM, Tokyo. Paratypes: 1 ♂, 1 ♀, with the same data as the holotype [NSM, Tokyo]; 1 ♂, Prov. Nantou, Wuling, 12 VIII 1991, leg. Y.C. Chang, slide No. 6698 ♂ Ronkay [TFRI Taipei].

Distribution. Taiwan.

***Stenoloba albiangulata* (Mell, 1943), comb. n.**

(Figs 14, 15, 43, 43a, 43b, 61)

Bryophilopsis (?) *albiangulata* Mell, 1943, Zool. Jb. (Systematik) 1 (3): 200, Abb. 6 b, c (TL: ♂, China, Prov. Guandong Lokong [LT: ♂, MNHU, Berlin]).

Diagnosis. Adult. Wingspan 19-20 mm (Chinese specimens), 23 mm (specimen from Vietnam). The species is easily recognizable by its unusual external appearance. Head and thorax yellow or whitish yellow, thoracic crest high, yellow. Forewing relatively short, costa arcuate, with apex rounded. Ground colour of forewing dark brown with olive-green suffusion; with wide yellow or whitish yellow zone running across forewing from base around ventral margin to middle, then curved to costal margin, dividing dark colouration of wing into two parts; costal area with more intense olive-greenish suffusion; terminal part darker, with some whitish irroration of white separating subterminal and terminal fields; cilia dark brown. Hindwing dark brown with yellowish suffusion in basal part; marginal suffusion conspicuously darker; cilia yellowish. Underside yellowish, forewing with well-discernible dark pattern elements, hindwing with a clearly visible discal spot, transverse line and darker terminal area.

Male genitalia (Figs 43, 43a, 43b). Uncus completely reduced, traceable only as minute extension; tegumen narrow, short; vinculum narrow, high, with rectangular saccus; juxta large, rounded, shield-like. Valva relatively short, broad, curved, its marginas more or less parallel; costal margin obtusely angled at apical area, surface of angle covered by small strong setae; apical margin oblique, directed ventro-

apically, with apex acute. Sacculus long, wide. Aedeagus tubular; vesica curved dorsally, with a large dorsal diverticulum in middle, bearing two smaller, but long secondary diverticula; terminal part armed with a field of small, fine spinules. Eighth tergite of abdomen sclerotized, having characteristical shape (Fig. 43b), being unique for the genus.

Female genitalia (Fig. 61). Ovipositor weak; papillae anales short; apophyses anteriores about 1.3 times longer than posterior ones. Antrum elongate, qudrangular, with deep cut in distal margin. Ductus bursae short; cervix bursae large, wide, sclerotized, covering ductus bursae and partially antrum. Corpus bursae long, membranous.

Material examined. Lectotype, designated here: ♂, with yellow label China, Guandong, Canton, Lokong, leg. R. Mell; handwritten label "Lok. 7 V [19]16", without label Type, but with genitalia preparate in capsula. Paralectotypes: ♀, with yellow label China, Guandong, Drachenkopf (Dr.), leg. R. Mell; handwritten label in Chinese; red label Type. 1♀, with yellow label China, Guandong, Canton, Lokong, leg. R. Mell; handwritten label "Lok. 7 V 19[16]", red label Type [MNHU, Berlin]. CHINA: 1♂, Mokanshan Prov. Chekiang VI 19 (Höne); 1♂, Linping, Pr. Kwantung VII 22 (Höne), slide No. ZFMK, Bonn 1893; 1♀, Kanton, Pr. Kwantung, 23.1.21 (Höne) slide No. ZFMK, Bonn 1894 [ZFMK, Bonn]. VIETNAM: 1♂, N Vietnam, Tam Dao, 1,200 m, 1-15 V 1992 (Sinajev & Simonov leg.) [ZMFK, Bonn].

Distribution. South-east China, North Vietnam.

Note. Although Mell (1943) mentioned the type material in the original description as consisting of 2 males and 1 female, the examined material comprises 2 females and 1 male, the latter with genitalia preparate in capsula. Apparently the genitalia of this specimen were illustrated in the original description.

***Stenoloba oculata* Draudt, 1950**

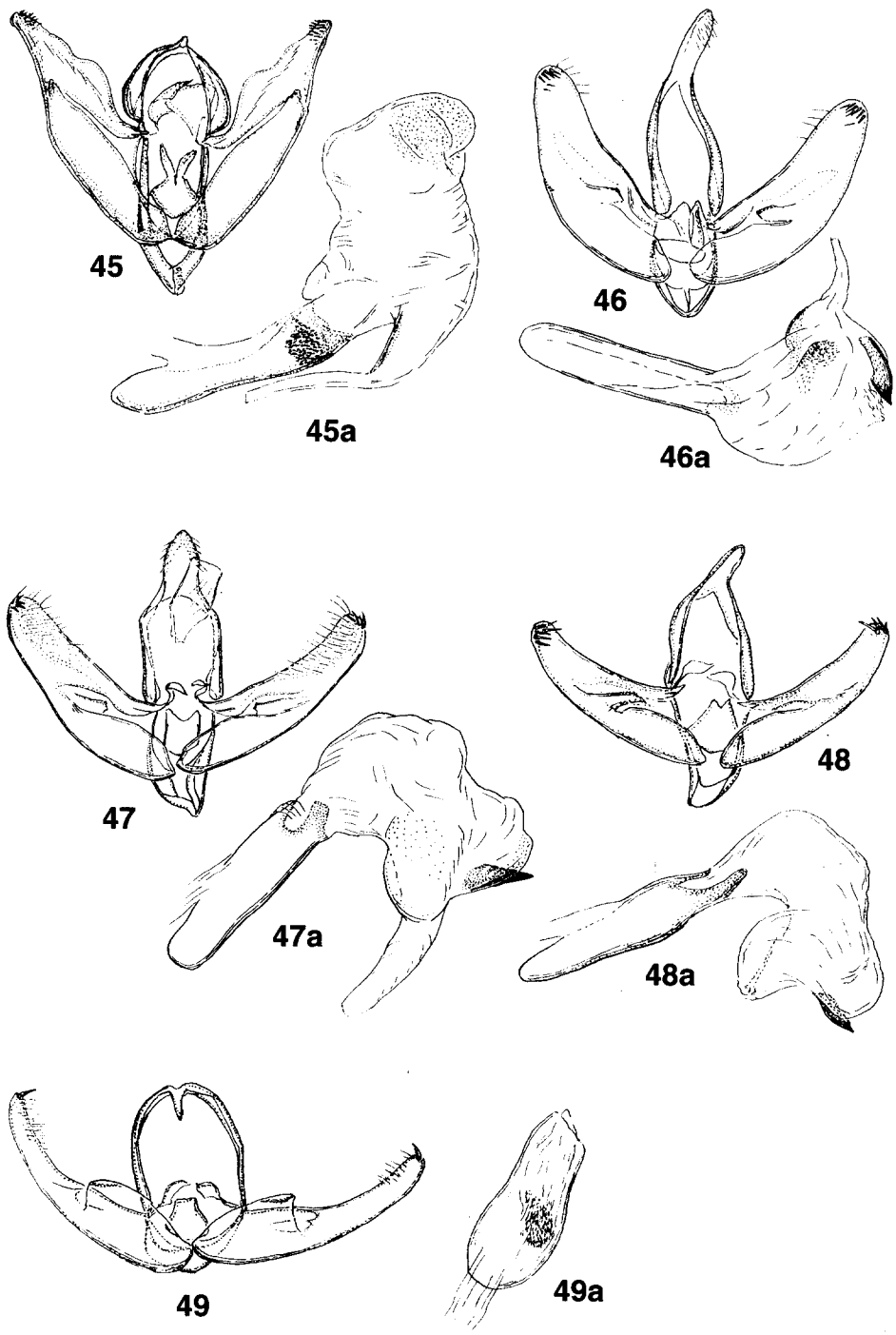
(Figs 16, 44, 44a, 62)

Stenoloba oculata Draudt, 1950, Mitt. münch. ent. Ges. 40: 132, pl. 8: 20 (Erastriinae) (TL: China: Prov. Hunan: Hoengshan, Prov. Zhejiang: W Tien-mu-shan [LT: ZFMK, Bonn]).

Sugi, 1970: 133, fig. 2; Sugi, 1982, 1: 685, 2: 348, pl. 167: 44; Kononenko, Ahn and Ronkay, 1998: 201, fig. 518.

Diagnosis. Adult. Wingspan 22-24 mm. The species is easily recognizable by its brown-reddish head and thorax, brown forewing ground colour with olive-brownish basal field and with distinct orange mark at tornus, defined with white, short bracket-like streak (inner end of postmedial line). Central area of medial field somewhat darker than other parts of wing; reniform stigma dark, diffuse; postmedial line paler, diffuse, being sharper at inner margin. Subterminal line pale, diffuse, indistinct; apical angle with obsolescent whitish mark. Terminal line dotted; cilia brown. Hindwing grey-brownish, darker in outer margin; cilia brownish, with yellowish basal line.

Male genitalia (Figs 44, 44a). Uncus small, rudimentary; tegumen narrow, rather short, vinculum longer; juxta narrow, subdeltoidal. Valva relatively short, broad, with almost parallel margins from base to distal part and with slight swelling on costa at about apical two-fifth; apical part strongly tapering into apex; apex armed with strong setae. Aedeagus relatively long, carina finely scobinate; vesica tubular, curved ventrally, with sclerotized ventral ribbon and scobinate terminal swelling.



Figs 45-49. Male genitalia and their aedeagus (a): 45. *S. brunnescens* **sp. n.**, holotype (Vietnam); 46. *S. olivacea* (Wileman, 1914) (Taiwan); 47. *S. fontinalis* Ronkay & Kononenko, 1998, holotype (Korea); 48. *S. albistriata* **sp. n.**, holotype (Upper Myanmar); 49. *S. futii* **sp. n.**, paratype (Malaysia).

Female genitalia (Fig. 62). Ovipositor weak; apophyses anteriores and posteriores equal in length. Antrum sclerotized, moderate, quadrangular, its margins slightly concave below posterior end; distal third weakly dilated. Ductus bursae relatively long, its left side sclerotized; cervix bursae partly weakly sclerotized and finely wrinkled. Corpus bursae medium-long, elliptical-ovoid, membranous.

Material examined. Lectotype designated here: ♂, CHINA: "West Tien-mu-shan Prov. Chekiang" 17 VI 1932 (H. Höne); "Holotype *Stenoloba oculata* Draudt, ♂", "*Stenoloba* oculata Draudt, ♂", "Preparation No H 355 Ch. Boursin". The lectotype is deposited in the ZFMK, Bonn. Paralectotypes: 4 ♂, 1 ♀: "Hoeng-Shan (500 m) Provinz Hunan, China" 19, 24, 25, 28, V 1933 (H. Höne), slide No. 1768 ♂ [ZFMK, Bonn]. All paralectotypes are deposited in ZFMK, Bonn.

Additional material examined. Japan: 1 ♂, Kawaburu-Spa, Gunma-Ken, 1.VII.1967 (T. Ebato) [NSM, Tokyo]. South Korea: 1 ♂, Seomyeon, Yangyang, GW, 25.VII.1987 (K.-T. Park) [CIS].

Distribution. Eastern and Central China, Japan (Hokkaido, Honshu, Shikoku), Korea.

***Stenoloba brunnescens* sp. n.**

(Figs 17, 45, 45a, 63)

Diagnosis. The species differs externally from the other members of the genus by its dark reddish brown colouration of forewing, without green or olive-greenish shining, being typical of numerous other species of *Stenoloba*. Male genitalia refer to its affinity with the taxa of the *S. clara* group by the shape of valva with swelling in the medial part. The structure of the vesica differs from the other members of the group by the absence of cornuti and the sclerotized ribbon and the basal position of the ductus ejaculatorius. The female genitalia differ mostly from those of the related taxa by their much broader antrum with significantly longer postero-lateral arms.

Description. Adult. Wingspan 23-24 mm. Head and thorax brownish ochreous, mixed with greyish yellow scales; apical part of thoracic tuft reddish brown; abdomen grey. Forewing rather narrow, arcuate at base, costal and ventral margins almost parallel. Ground colour of forewing reddish brown, wing pattern consisting of indistinct, diffuse darker and paler yellowish brown patches; basal area with black streak on ventral side of wing; subbasal, ante- and postmedial lines indistinct, appearing as weak darker suffusion; orbicular variably strong, represented by two small blackish marks formed by erected scales; reniform sharply defined, blackish, rounded, with paler centre, surrounded by paler yellowish brown suffusion; costal area spotted with four small black marks, separated by yellowish streaks; marginal field somewhat darker than medial field; apical angle with oblique, obsolescent greyish mark; tornal angle darkened, with diffuse, pale yellowish grey spot; terminal line a row of dark brown dots; cilia dark brown, with pale basal line. Hindwing dark greyish brown; outer part slightly darker with weak ochreous terminal suffusion; terminal line dark brown; cilia pale yellowish brown. Underside yellowish brown, forewing with dark brown suffusion in central part, dilute around outer margin; discal spot and postmedial line well-discernible; terminal line marked by a row of dots. Hindwing with distinct discal spot, diffuse medial and distinct terminal lines.

Male genitalia (Fig. 45, 45a). Uncus very small, rudimentary; tegumen short with relatively wide lobes; vinculum narrow, about two times as long as tegumen; juxta cordiform, with two apical extensions. Valva

relatively short, broad at base, with prominent swelling on costa at middle; distal part of valva tapering, apex armed with short, strong setae. Aedeagus relatively large, as long as valva; carina finely scobinate; vesica rather simple, large, globular, basal part with two moderate diverticula; distal part with flattened, weakly scobinate diverticulum; ductus ejaculatorius arising from basal part of vesica.

Female genitalia (Fig. 63). Ovipositor weak; apophyses anteriores and posteriores short, equal in length. Antrum sclerotized, broad but short, quadrangular with long postero-lateral sclerotized arms and medium-large, concave caudal incision. Ductus bursae relatively long, flattened, sclerotized; cervix bursae conical, finely wrinkled. Corpus bursae medium-long, elliptical, membranous.

Material examined. Holotype: male, Vietnam, Prov. Lao Cai, Fan-si-pan Mts, 1920 m, 4 km SW Cat Cat, 14 V 1998, leg. the staff of the Frontier camp; slide No. 6436 (♂) Ronkay. Paratypes: 1♂, 1♀, with the same data as the holotype; slide No. 6708 (♀) Ronkay. The types are deposited in the Hungarian Natural History Museum (Budapest).

Distribution. Vietnam.

The *olivacea* species-group

Stenoloba olivacea (Wileman, 1914)

(Figs 18, 46, 46a, 64)

Chytonix olivacea Wileman, 1914. Entomologist, 47: 165 (TL: Taiwan, Rantaizan [LT: ♂, BMNH, London]).

Hampson, 1910: (*Conicochyta*); Wang, 1995: 182 (*Conicochyta*).

Description. Adult. Wingspan 33-34 mm. Body slender, head and thorax pale greenish, mixed with brown, collar and tegulae marked with some blackish, whitish and dark brown scales. Abdomen slender, dorsal crest well-developed, consisting of dark blackish brown tufts. Forewing rather broad, costa less arcuate, apex finely pointed. Ground colour pale mossy green, costal and medial areas suffused with brownish; basal line rather sharp, blackish, defined with whitish scales, almost straight below cell; antemedial and postmedial lines relatively pale, double, waved, with large dark patches at costa; lower part of medial area strongly constricted; orbicular and claviform stigmata missing, reniform whitish with darker brown centre, incompletely encircled with brown. Subterminal diffuse, whitish, defined by a pale brownish shadow and a few dark spots; terminal line a row of brown spots; cilia greenish. Hindwing large, rounded, whitish, inner third and broad marginal area suffused with darker brownish; discal spot big, rounded, rather diffuse; transverse line indistinct, waved. Underside of wings whitish, large parts of forewing suffused with brownish grey; discal spots and transverse lines present on both wings.

Male genitalia (Figs 46, 46a). Characterized by the relatively wide, long uncus. Tegumen high, narrow; vinculum short; juxta ellipsoidal. Valva simple, elongate, broader than that of *S. fontinalis*, tapering slightly from middle towards apex; apex rounded, with 5-6 short spines at apical margin; costa expressed strongly in basal part of valva; sacculus elongate, narrow; rudiment of clasper-harpe complex forming separate plate in middle of valva, with tiny protuberance. Aedeagus large, about 4/5 of length of valva,

being thinner than that of *S. fontinalis*; carina sclerotized, short, relatively wide; vesica large, inflated, sac-like, armed with a single, large spine-like terminal cornutus and with small; short setiform cornuti arranged into sparse cornuti field.

Female genitalia (Fig. 64). Ovipositor weak, with relatively large papillae anales; apophyses posteriores and anteriores equal in length. Antrum sclerotized, flat, medium-long, trapezoidal-funnel-like, constricted proximally. Ductus bursae short, flattened, sclerotized; cervix bursae very small, membranous. Corpus bursae elongate-sacculiform.

Material examined. Holotype: male, Taiwan, Rantaizan [BMNH, London]. Taiwan: 1♂, Hualien, Tayuling, 7-8 VI 1982 (T. Tanabe), slide No. NTSM 5097 (♂); 1♀, Hualien, (2,000 m) Near Pilu, 4-6 VI 1982 (T. Tanabe) [NSM, Tokyo]; Prov. Taouyan, 14 km E Fuhsing, 800 m, 31 V 1995, 121° 23'E, 24° 50'N, leg. M. Hreblay & P. Stéger; 4♀, Prov. Kaohsiung, 10 km NW of Lirao, 2,500 m, 30 V 1995, 120° 57'E, 23° 17'N, leg. M. Hreblay & P. Stéger; 6♂, 2♀, Prov. Nantou, 6 km SW Hohuan Pass, Yuanfeng, 2760 m, 24 V 1997, leg. Gy. M. László & G. László; 4♂, 3♀, Prov. Nantou, 5 km SW to Hohuan Mountain on the road 14, 2756 m, 24° 07'N, 121° 11'E, 8 VIII 1999, leg. A. Kun and E. Juhász; 1♂, Prov. Taitung, Hsiangyang, 2200 m, 13-14 VI 1997, leg. B. Herczig and L. Ronkay [HNMH, Budapest and the collectors].

Distribution. Taiwan.

***Stenoloba fontinalis* Ronkay & Kononenko, 1998**

(Figs 19, 47, 47a, 65)

Stenoloba fontinalis Ronkay & Kononenko, 1998, in Park (ed.): Ill. Cat. Noct. Korea, 1998: 202, 391, fig. 522. [TL: North Korea, Mt. Myohyang-san [LT: HNHM, Budapest]).

Diagnosis. Wingspan 26-32 mm, length of forewing 13-17 mm. This species is a close relative of *S. olivacea*. The two taxa differ externally in several details, e. g. the wings of *S. fontinalis* are somewhat narrower with more pointed apex; the darker suffusion is more extensive, covering most parts of the medial and marginal areas; the basal line is less sharply defined, not straight but arcuate; the ante and postmedial crosslines are sharper; the medial area is less constricted; the orbicular is represented by a small, dark spot; the reniform is smaller, darker; the hindwing is lighter with less extensive brownish suffusion.

The male genitalia (Figs 47, 47a) differ from those of *S. olivacea* by their more massive, shorter and wider uncus, narrower valva (especially at middle), and the more or less quadrangular plate of the juxta. The vesica is somewhat larger than those of *S. olivacea*, without field of setiform cornuti, and the terminal cornutus is more massive, more conical than that of S. olivacea. The female genitalia (Fig. 65) have proximally broader, less sclerotized antrum (funnel-like in *S. olivacea*) and shorter ductus bursae than those of *S. olivacea*.

Material examined. Holotype: male, North Korea, Prov. North Pyongan, Mt. Myohyang-san, Isonnam valley, 23 V 1991, No 1388 (L. Ronkay and A. Vojnits), slide No. 4670 Ronkay [HNHM, Budapest]. Paratypes. North Korea: 1♂, with the same data as the holotype, slide No. 4692 Ronkay [HNHM, Budapest], 1♀, Pyongyang, Ryongaksan Mts, 200 m, 7 VII 1987 (J. Jaros leg.) [IBP,

Vladivostok]. South Korea: 1♂, Daegwanryong, 11-12 VI 1997 (S.B. Ahn), slide No. 971218-18VSK; 1♀, Tahdong, 13 VI 1994 (G.J. Weon) [NIAST, Suwon, Korea].

Distribution. Korean peninsula.

***Stenoloba albistriata* sp. n.**

(Figs 20, 21, 48, 48a, 66)

Diagnosis. The new species is a typical member of the *S. olivacea* species-group, differing externally from the related species, *S. olivacea* and *S. fontinalis*, by its smaller size; the presence of strong reddish brown spots at base of forewing; the conspicuous, white-filled, sinuous ante- and postmedial crosslines bordering the broad medial area; the well-discernible, wide, dark medial stripe; the relatively distinct, sinuous transverse line of the hindwing. The male genitalia of the new species differ from those of its allied species by their narrower valva, shorter and narrower the uncus, and shape of the aedeagus and vesica. The female genitalia differ from those of the related taxa by the presence of a heavily sclerotized crest in the lateral part of the cervix bursae.

Description. Adult. Wingspan 26-28 mm. Head and thorax greenish white, collar and tegulae marked with blackish brown; abdomen greyish, dorsal crest consisting of small, blackish tufts. Forewing elongated, narrow; costa arcuate. Ground colour pale, ochreous moss-green; costal parts of ante- and postmedial lines forming large whitish patches; basal line obsolescent; basal field regularly with rounded, red-brownish spots; ante- and postmedial lines conspicuous, double, sinuous, filled with white, defined by blackish brown; medial line a strong, wide, dark brownish stripe; Subapical costal patch represented by sharp, blackish triangle; subterminal line obsolete, whitish, defined with a pale brownish shadow. Hindwing whitish; suffused with grey-brownish; discal spot small, lunulate; transverse line sinuous, diffuse but well-visible. Underside of wings whitish; forewing suffused strongly with dark grey, discal spot large, diffuse, transverse line obsolescent; hindwing irrorated with brownish grey, discal spot and transverse line relatively strong.

Male genitalia (Figs 48, 48a). All structures are smaller than in the two preceding species. Uncus shorter than that of S. olivascens, and narrower than in both related species; tegumen long, narrow; vinculum short; juxta broadly deltoidal. Valva simple, elongate, with almost parallel margins, tapering only slightly towards apex; apex rounded, with 5-6 short spines at apical margin; sacculus elongate, narrow; clasper-harpe complex reduced to narrow, triangular, apically finely rounded plate in middle of valva. Aedeagus large, about as long as valva but thinner than in the related species and somewhat swollen in apical part; carina sclerotized, its sclerotized bars longer than in the related taxa; vesica large, elongate, sac-like, with wide terminal diverticula bearing large, spine-like cornutus.

Female genitalia (Fig. 66). Ovipositor weak, short; apophyses anteriores and posteriores equal in length. Antrum sclerotized, more or less funnel-like. Ductus bursae rather wide, flat, moderately long, sclerotized; cervix bursae sclerotized, with heavily sclerotized lateral crest on right side. Corpus bursae rounded-elongate, membranous.

Material examined. Holotype: male, Myanmar, Hpimaw Fort, Nr. Mytkyina. 8000 ft. Capt. A. E. Swann./Brit. Mus. 1923-488. Slide No. 5077 ♂ Ronkay. Paratypes. Myanmar: 1♀ with same labels,

not dissected; 1♀, Myanmar, A. E. Swann. B. M. 1923-347. Slide No. 5078 [BM (NH)]. Vietnam: 2♀, Cha-pa, Mt. Fan-si-pan, 22° 13'N, 103° 46'E, 1,500-1,800 m, 8-28 V 1993, V. Sinaev & M. Simonov [coll. W. Speidel]. The holotype and the paratypes from Myanmar are deposited in BM (NH), the two paratypes from Vietnam are in coll. W. Speidel, Germany.

Distribution. Myanmar, North Vietnam.

***Stenoloba futii* sp. n.**

(Figs 22, 49, 49a, 67)

Diagnosis. The smallest known member of the *olivacea*-group, smaller than *S. albistriata*, its forewing costa is more convex; the ante- and postmedial crosslines are less strongly marked, less sinuous, their whitish filling rather scarce; the antemedial line is oblique and almost straight; the subapical dark spot is smaller. The male genitalia can be characterized by the short uncus, the narrow, elongate valva and the short, massive aedeagus.

Description. Adult. Wingspan 22-23 mm. Head, and thorax pale ochreous-greenish, mixed with some dark brown grey. Forewing rather short, costa strongly convex. Ground colour pale ochreous green, lower part of medial area irrorated with dark greyish brown; basal line represented by some blackish spots and brownish patches; antemedial line oblique, almost straight; medial line an interrupted, diffuse dark stripe; postmedial line slightly sinuous, defined with whitish at outer side; dark costal spot relatively small, triangular; orbicular stigma missing or a fine, dark brown circle; reniform stigma oblique, elliptical, whitish, encircled with blackish grey; subterminal indistinct, whitish; terminal line a row of fine blackish spots. Hindwing whitish; veins and marginal area darker brown; discal spot small, rounded. Underside of both wings whitish, forewing suffused with darker grey; discal spots and parts of transverse lines present but rather diffuse.

Male genitalia (Figs 49, 49a). Uncus rudimentary, short, weak; tegumen long, very narrow; vinculum short; juxta plate-like. Valva simple, narrow, elongate, narrower and rounded in apex, with single strong spine at apex; sacculus elongate, with wide lobe, extending over dorsal margin of valva; clasper-harpe complex not expressed. Aedeagus large, massive, shorter than valva, tapering apically; vesica with a small patch fine, setiform cornuti.

Female genitalia (Fig. 67). Ovipositor weak, short; apophyses anteriores and posteriores short, equal in length. Antrum sclerotized, relatively short, more or less quadrangular, slightly dilated medially, with short postero-lateral arms. Ductus bursae less sclerotized, flat, curved. Corpus bursae long, sacculiform, membranous.

Material examined. Holotype. male, "Malaysia, Pahang state, Cameron Highlands, Tanah Rata, No. 72, 21 III-2 IV 1995, leg. G. Csorba, T. Fuisz, O. Merkl & I. Szikossy" [HNHM, Budapest]. Paratypes: Malaysia, Cameron Highlands, Tanah Rata: 6♂, with the same data as holotype, 1♂, 1♀, 3 III 1982, leg. G. Hangay & A. Vojnits [HNHM, Budapest]; 3♂, 6♀, "Cameron Highlands, Malaysia, native collector, 1984" (1♂ with slide No. SS-4559); 2♀, Malaysia, Cameron Highlands [Coll. S. Sugi, Tokyo].

Distribution. Malaysia, Cameron Highlands.

The *rectilinea* species-group

Stenoloba cineracea sp. n.

(Figs 23, 24, 50, 50a, 68)

Diagnosis. The new species resembles to *S. rectilinea*, but having broader forewing, more sinuous basal line without straight distal part and stronger paler suffusion on the basal part of the wing. The male genitalia differ from those of *S. rectilinea* by their rudimentary uncus, wide and relatively short valva and the different armature of the vesica.

Description. Adult. Wingspan 19–23 mm. Head and thorax greyish, collar and tegulae partly ochreous. Forewing rather broad, short; ground colour brownish grey, base of wing covered with ochreous scales; subbasal line blackish; basal line sinuous, more or less arcuate, marked with blackish brown. Other elements of wing pattern obsolescent; some parts of postmedial line and outline of reniform stigma can be recognized. Hindwing uniformly greyish brown; discal spot present, shadow-like.

Male genitalia (Figs 50, 50a). Uncus rudimentary, very small; tegumen moderate, with rather broad lobes; vinculum U-shaped, equal with tegumen in length; juxta narrow, shield-like. Valva simple, relatively short, slightly narrower distally, rounded apically, with two small spines in apex; sacculus moderately narrow. Aedeagus massive, large, about as long as valva, with stronger apical sclerotization; carina short; vesica everted ventrally, broadly tubular, inflated, with ear-shaped diverticula, covered densely with small setae dorso-apically and with wide field of numerous seta-like cornuti ventrally.

Female genitalia (Fig. 68). Ovipositor weak, short, papillae anales very weak; apophyses anteriores and posteriores equal in length. Antrum triangular, weakly sclerotized. Ductus bursae relatively long, membranous; cervix bursae weakly sclerotized. Corpus bursae rather spacious, elongate, membranous.

Material examined. Holotype: male, China [Prov. Shaanxi], "Tapaishan im Tsinling, Sued-Shensi, ca. 1700 m", 10 VII 1936 (H. Höne); slide No. ZFMK, Bonn 1771.

Paratypes: 1♂, from the same locality, 8 VII 1936; 1♀, same locality, 3,000 m, 13 VII 1938 (H. Höne), slide No. ZFMK, Bonn 1772; 1♀, Mokanshan, Prov. Chekiang, 22 VI 1930 (H. Höne). The type-series, including the holotype, is deposited in ZFMK, Bonn.

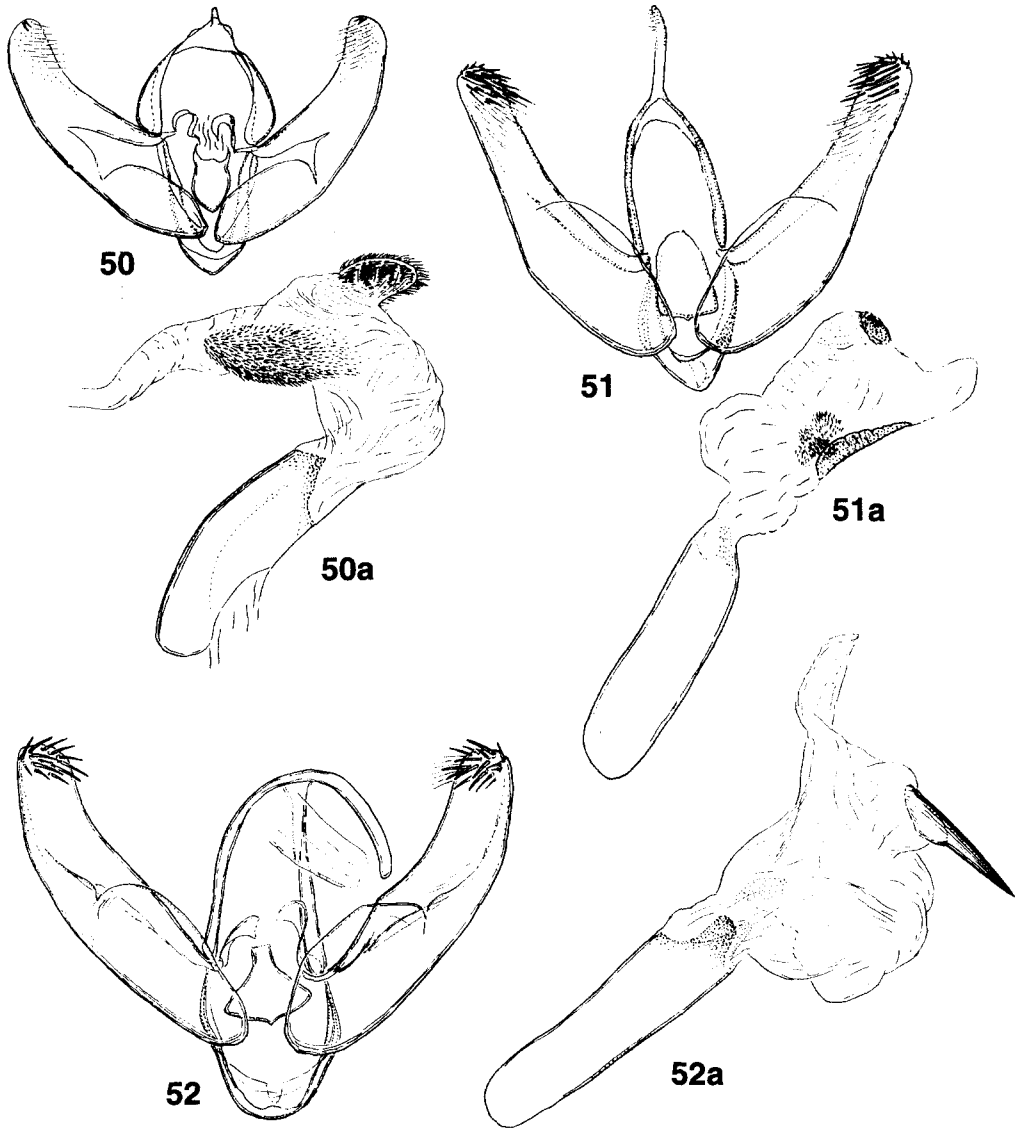
Distribution. Central China.

Stenoloba rectilinea Yoshimoto, 1992

(Figs 25, 26, 51, 51a, 69)

Stenoloba rectilinea Yoshimoto, 1992, Tinea, 13 (suppl. 2): 52, pl. 13: 13. (TL: Nepal, Godavari [LT: NSM, Tokyo]).

Diagnosis. Adult. The females are remarkably larger in size than the males, wingspan 25–27 mm (males), 28–30 mm (females). The species has a characteristic shape of the forewing with oblique costal margin in the basal part and almost parallel costal and ventral margins in the whole length of the wing; crosslines and spaces between lines appear in costal area as brown-greenish and brownish marks.



Figs 50-52. Male genitalia and their aedeagus (a): 50. *S. cineracea* **sp. n.**, holotype (China, Tapaishan); 51. *S. rectilinea* Yoshimoto, 1994, paratype (Nepal); 52. *S. domina* **sp. n.**, paratype (Taiwan).

Male genitalia (Figs 51, 51a). Uncus rather long, weak, flattened; tegumen high, narrow; juxta shield-like. Valva elongate, narrower distally, with strong spine-like setae on apex; sacculus with wide lobe. Aedeagus large, thick, shorter than valva; vesica inflated; medial part with sclerotized, wrinkled plate and a cornuti field consisting of small setiform cornuti; distal part with short, wide-based terminal spine.

Female genitalia (Fig. 69). Ovipositor weak, short; apophyses equal in length. Antrum sclerotized, flat, funnel-like, connecting gradually into ductus bursae; its upper margin with shallow central cut and broad

but short postero-lateral extensions. Ductus bursae rather long, flat, with sclerotized fold in caudal a fourth at junction to corpus bursae. Corpus bursae rather wide, rounded, elongate, membranous.

Material examined. Type series, including holotype: 3♂, 2♀, Kathmandu, Godavari 1,600 m, 28 IV, 13 V.1991; 6 16 V 1990 [NSM, Tokyo], slide No. HY 1705. NEPAL: 8♂, 4♀, Kathmandu, Godavari, Phulchoki Mt., 2,200 m 30 IV-7 V 1996 (V. Kononenko) [IBP, Vladivostok]; 1♀, Annapurna Himal, Geirigan village, 1,340 m, 31 V 1996, leg. Gy. M. László and G. Ronkay; slide No. 6703 ♀ Ronkay [coll. G. Ronkay, Budapest].

Distribution. Central Nepal.

The *basiviridis* species-group

Stenoloba basiviridis Draudt, 1950

(Figs 27, 70)

Stenoloba basiviridis Draudt, 1950, Mitt. münch. ent. Ges. 40: 132, pl. 8: 19 (Erastriinae) (TL: China, W Tien-mu-shan [LT: ♀, ZFMK, Bonn]).

Diagnosis. Adult. Female. Wingspan 29 mm. Thoracic crest long, consisting of salad-greenish scales laterally and of dark-grey ones in centre; patagia greenish, lined by black. Forewing relatively broad, short, with apex rounded; ground colour brownish ash-grey with light greenish tint; elements of wing pattern somewhat darker; basal field salad-green, defined with white and black scales; basal line represented by two strong black marks; antemedial line double, fine, indistinct; medial shadow wide, diffused; reniform represented by dark suffusion; postmedial line dark, thin, waved, followed by pale whitish greyish dots; subterminal and terminal fields slightly paler; subterminal line sinuous, rather diffuse, defined with paler greyish shadow; terminal line dotted; cilia brown. Hindwing brownish grey; marginal area darker; discal spot traceable; cilia brown, with yellowish basal line. Male unknown.

Female genitalia (Fig. 70). Ovipositor weak, papillae anales elongate; gonapophyses rather long, almost equal in length. Antrum long, flattened, most parts sclerotized, caudal margin with shallow medial incision and broad but short postero-lateral extensions. Ductus bursae short, about half as long as antrum, flattened, heavily sclerotized. corpus bursae elongate, narrow, membranous, fundus somewhat wider.

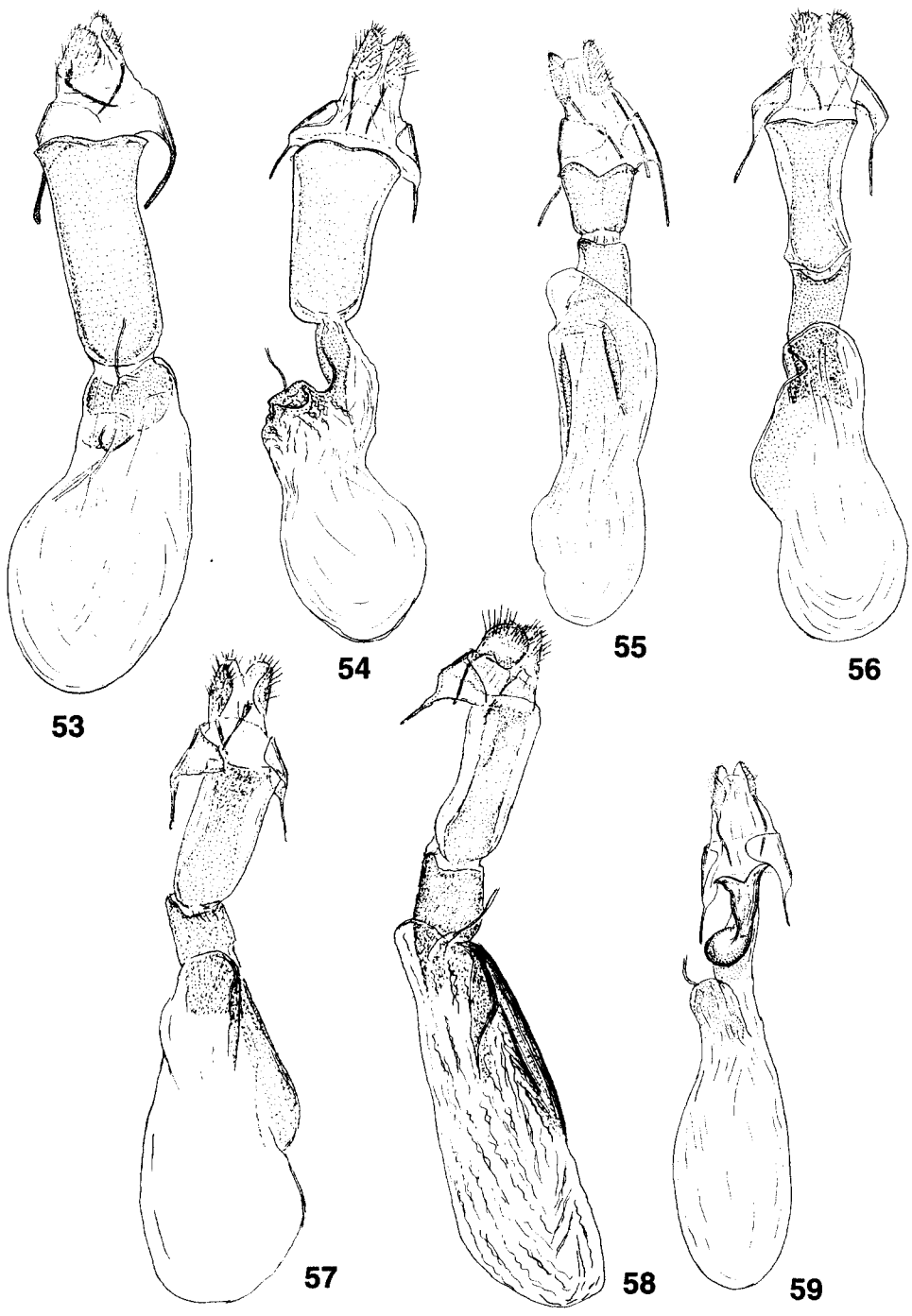
Material examined. Holotype: female, China, Prov. Zhejiang, "West Tien-mu-shan, (1,600 m) Pz. Chekiang" 19 VII 1932 (H. Höne); "Holotype *Stenoloba basiviridis* Draudt"; slide No. ZFMK, Bonn 1790. The holotype is deposited in ZFMK, Bonn.

Distribution. East China (Prov. Zhejiang).

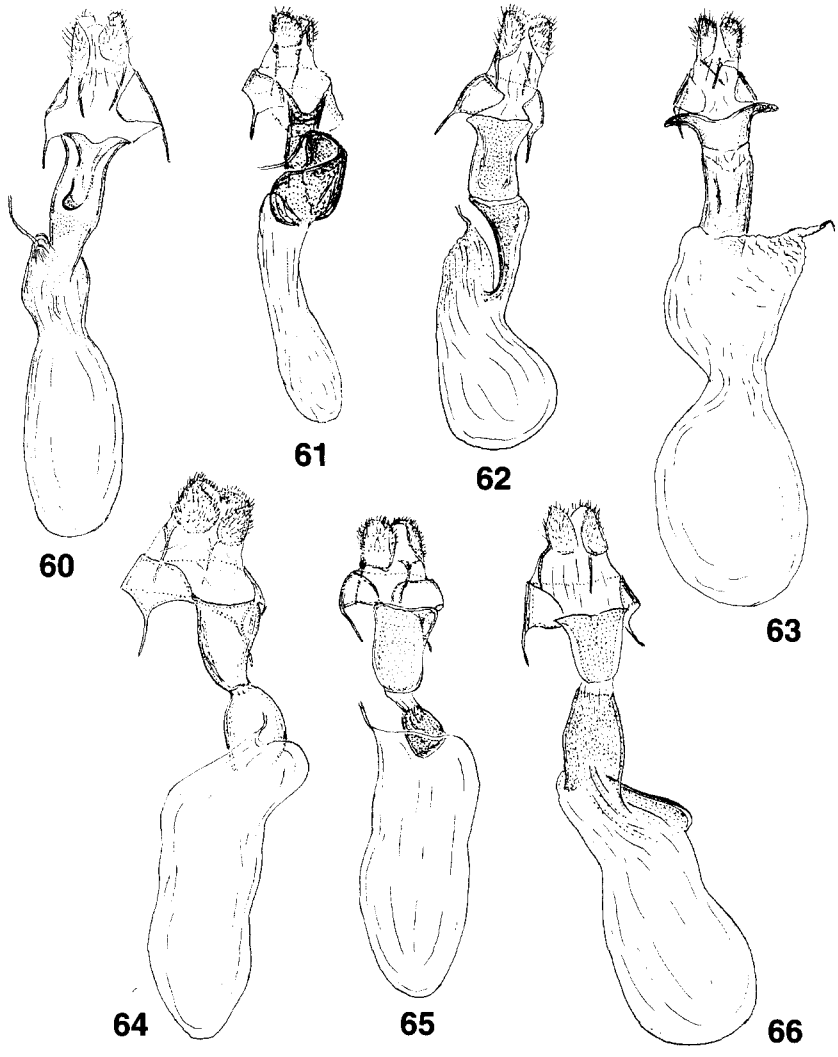
Stenoloba domina sp. n.

(Figs 28, 52, 52a)

Diagnosis. The new species resembles *S. basiviridis* but significantly larger in size; the basal area of the forewing is cleaner green; the marginal area with a conspicuous, large, rounded pinkish green patch at



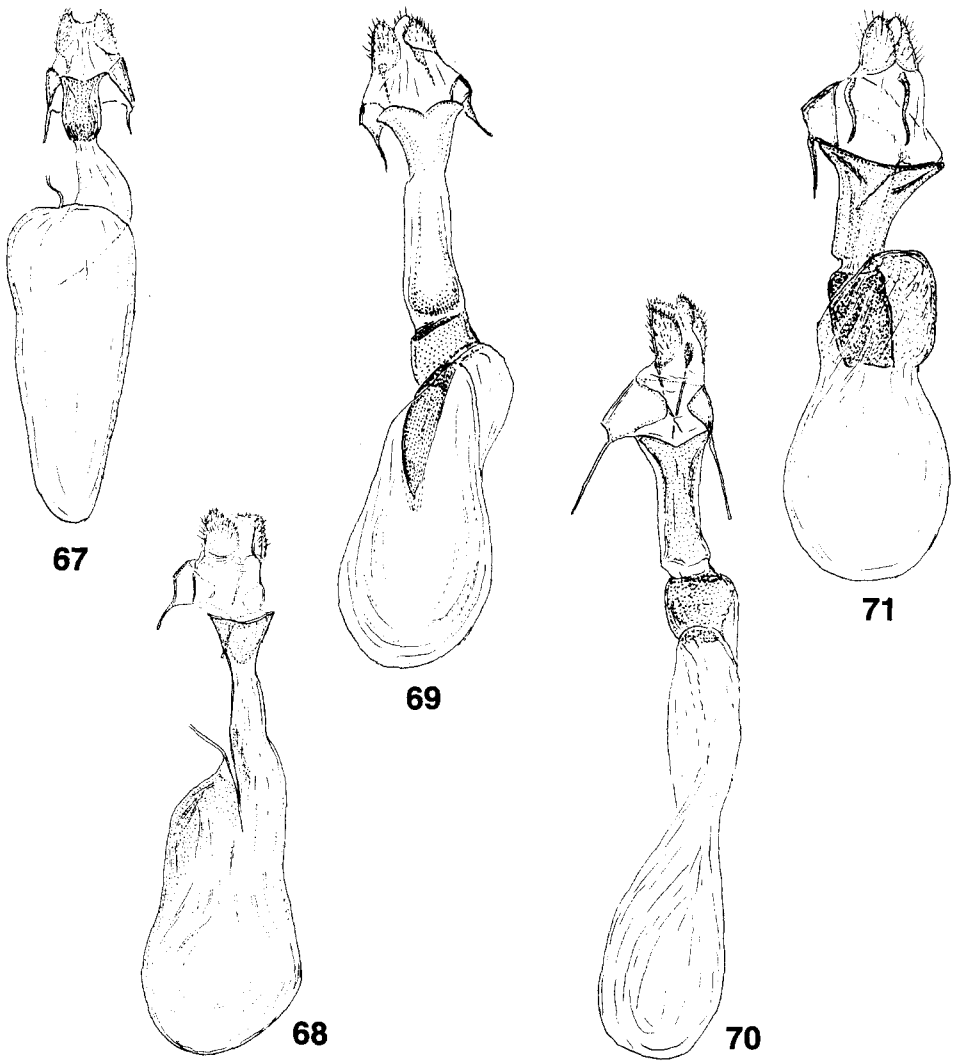
Figs 53-59. Female genitalia: 53. *S. jankowskii* (Oberthr, 1884), (RFE, Primorye terr.); 54. *S. marina* Draudt, 1950, (China, Sichuan); 55. *S. assimilis assimilis* (Warren, 1909), (RFE, Primorye terr.); 56. *S. manleyi ryukyuensis* **ssp. n.**, paratype (Japan, Ryukyu); 57. *S. manleyi formosanus* **ssp. n.**, paratype (Taiwan); 58. *S. bachmana* **sp. n.**, paratype (North Vietnam); 59. *S. clara* (Leech, 1889), (Japan, Honshu).



Figs 60-66. Female genitalia: 60. *S. clarescens* **sp. n.**, paratype (Taiwan); 61. *S. albiangulata* (Mell, 1943), (South China); 62. *S. oculata* Draudt, 1950 (Japan); 63. *S. brunnescens* **sp. n.**, paratype (Vietnam); 64. *S. olivacea* (Wileman, 1914), (Taiwan); 65. *S. fontinalis* Kononenko & Ronkay, 1998, paratype (Korea); 66. *S. albistriata* **sp. n.**, paratype (Myanmar).

the tornus. The male genitalia can be characterized by the well-developed, flattened uncus and the large, strong, thorn-like cornutus of the vesica.

Description. Adult. Wingspan 32-34 mm. Head and thorax dark greyish brown mixed with green. Forewing high triangular with pointed apex; ground colour dark greyish brown with fine greenish shade and irroration. Subbasal line represented by three blackish spots; basal line a fine, arcuate, sinuous black stripe; basal area bright salad-green; antemedial and postmedial lines less conspicuous, double, slightly sinuous, former oblique, defined with greenish white, latter with some greenish irroration at costa and



Figs 67-71. Female genitalia: 67. *S. futii* **sp. n.**, paratype (Malaysia); 68. *S. cineracea* **sp. n.**, paratype (China, Tapaishan); 69. *S. rectilinea* Yoshimoto, 1994, paratype (Nepal); 70. *S. basiviridis* Draudt, 1950, holotype (China, West Tien-mu-shan); 71. *S. dominula* **sp. n.**, holotype (China, Fukien).

with a large, pinkish green patch at tornus; inner margin with stronger or weaker reddish-brown suffusion; orbicular and reniform stigmata incompletely encircled with blackish brown spots and lines; apical spot greenish; subterminal line indistinct; terminal line a row of dark brown spots. Hindwing greyish brown; veins and marginal area somewhat darker; discal spot lunulate, shadow-like. Underside of wings ochreous greyish; forewing strongly suffused; hindwing rather sparsely irrorated with greyish brown scales; discal spots and transverse lines well-discernible. Female unknown.

Male genitalia (Figs 52, 52a). Uncus well developed, flattened, rather long, about half as long as tegumen; tegumen high, narrow; vinculum narrow, rather short; juxta deltoidal. Valva simple, narrow,

with almost parallel margins; distally weakly tapering, apically rounded; apex with numerous strong spine-like setae. Sacculus with broad lobe, extending over dorsal margin of valva. Aedeagus large, shorter than valva, sclerotized apically; carina with short, wide plates; vesica spherical, sac-like; terminal part with large, semiglobular diverticulum, bearing large, strong, thorn-like cornutus.

Material examined. Holotype: male, Taiwan, Taichung, Wulieng, 1,700 m, 27-28 VI 1989 (M. Owada). Paratype: 1 ♂, with the same data as the holotype. The two types are deposited in NSM, Tokyo.

Distribution. Taiwan.

***Stenoloba dominula* sp. n.**

(Figs 29, 71)

Diagnosis. The species is close to *S. domina*, but differs from it by the somewhat narrower forewing with rounded apical angle; yellowish brown vestiture of head and thorax; larger, confuse maculation in lower part of wing; and, in particular, the narrower, ochreous yellowish basal field. The unique female specimen is known.

Description. Adult. Wingspan 31 mm. Head and thorax dark ochreous yellow, mixed with brownish hair-scales; patagia and thoracic crest also brownish. Forewing elongate with rounded apex; ground colour dark greyish brown; subbasal line represented by three blackish spots; basal line diffuse, dantate, blackish, filled with indistinct white line; basal area smaller, narrower than in S. domina, pale ocher-yellowish; antemedial line traceable, oblique, thin, double, filled with brownish; median fascia broad, diffuse; postmedial line more conspicuous, double, slightly sinuous, with some whitish irroration at costa and with large, pale pinkish yellow patch at tornus; inner margin with well-defined, pale ochreous zone running from basal field to postmedial line, connected with tornal patch, tapering towards lower border of cell; orbicular stigma traceable as dark, diffuse spot; reniform stigma incompletely encircled with blackish brown line; apical spot represented by whitish, semilunar patch; subterminal line indistinct, shadowed by dark brown; terminal line a row of dark brown spots. Hindwing greyish brown, marginal area somewhat darker; discal spot traceable, lunulate, shadow-like. Underside of wings ochreous brown; forewing strongly suffused; hindwing rather scarcely irrorated with greyish brown. Discal spots and transverse lines present, diffuse. Male unknown.

Female genitalia (Fig. 71). Ovipositor weak, papillae anales short, slightly conical; gonapophyses relatively strong, almost equal in length. Antrum moderate in length, flattened, sclerotized in central part, dilated strongly in caudal part, postero-lateral extensions long, relatively narrow. Ductus bursae sclerotized, relatively short; cervix bursae large, rounded, sclerotized. Corpus bursae rather wide, elliptical-ovoid, membranous.

Material examined. Holotype: female, China, Prov. Fujian Kuatun 2,300 m (Fukien), 27.40 n. Br/117. 40. L. 11 VII 1938 (H. Höne); slide No. 1897; deposited in coll. ZFMK, Bonn.

Distribution. South China.

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